



Creating Subscriber Accounts

Overview: Creating Subscriber Accounts

Anyone who has an account on Cisco Unity is a subscriber. Each subscriber has an Exchange mailbox in which Cisco Unity stores voice messages. The Active Directory or Exchange 5.5 accounts for subscribers contain Cisco Unity-specific information.

Cisco Unity stores all information about subscriber accounts in a SQL database on the Cisco Unity server. However, a small subset of the subscriber account information is also stored in the directory. The directory that Cisco Unity uses for data storage depends on the Exchange server that was selected in the Cisco Unity Server Configuration Wizard during setup. The server that was selected depends on your Exchange network.

When your network consists only of Exchange 5.5 servers:

- The directory in which Cisco Unity stores subscriber data is the Exchange 5.5 directory.
- In the Exchange 5.5 directory, each subscriber account uses custom attribute fields 12 and 14 as well as the voice mail attributes of the associated Exchange mailbox.
- Only Exchange 5.5 users can be imported into Cisco Unity.

When your network consists only of Exchange 2000 servers, or a mixture of Exchange 2000 and Exchange 5.5 servers:

- Cisco Unity stores subscriber data in Active Directory.

- The Active Directory schema is extended to store subscriber account information.
- Both Exchange 5.5 and Exchange 2000 users can be imported into Cisco Unity.

You create subscriber accounts by using either the Cisco Unity Import utility or the Cisco Unity Administrator.

Cisco Unity Import utility

The Cisco Unity Import utility is useful when you need to create many subscriber accounts at once. With the Import utility, you can create accounts by using information from a comma-separated value (CSV) file or directly from Exchange mailbox data. Users with or without existing Windows accounts and Exchange mailboxes can be imported by using a CSV file.

You can also create Internet subscribers by importing them with a CSV file. To import AMIS and Cisco Unity Bridge subscribers in bulk, use the External User Import utility. Refer to the “AMIS Networking” chapter and the “Bridge Networking” chapter, as appropriate, in the *Networking in Cisco Unity* guide for more information about the External User Import utility. (The *Networking in Cisco Unity* guide is available on Cisco.com at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/unity31/net/ind ex.htm.)

To create subscriber accounts with user information from another voice messaging system or database, you can create a CSV file of the user data and import it into Cisco Unity. When importing from a CSV file, Cisco Unity creates the Windows account and Exchange mailbox, if they do not already exist, for each subscriber. When using a CSV file to import users who do not already have Exchange 2000 mailboxes, the mailboxes for the subscribers are created in the Exchange store and organizational unit (OU) that you specified in the Cisco Unity Server Configuration Wizard during setup. After the subscriber accounts have been created, you can move the mailboxes as needed. Refer to the procedure on moving mailboxes in the Microsoft documentation that is appropriate to your version of Exchange.

Cisco Unity Administrator

Within the Cisco Unity Administrator, you can create subscriber accounts one at a time either by adding subscribers or by importing users from Exchange. When adding new subscribers, Cisco Unity creates the Windows account and Exchange mailbox automatically. When Cisco Unity is connected to Exchange 2000, and

you add a subscriber, the subscriber mailbox is created in the domain and OU that was specified in the Cisco Unity Server Configuration Wizard during setup. If you want the subscriber mailbox to be in another domain, create the Windows account and Exchange mailbox first, and then import the user into Cisco Unity. You can also create Internet, AMIS, and Bridge subscribers by using the Cisco Unity Administrator.

Importing Users from Different Sites and Routing Groups

Cisco Unity can import Exchange 5.5 users only from the same site that Cisco Unity is in. Importing users from other Exchange 5.5 sites is not supported. Although it is possible to import users from other Exchange 2000 routing groups (and other organizational units), do this only if there is a high-bandwidth connector between the groups that can support message streaming. When subscribers are in a different routing group than Cisco Unity, messages are streamed from the Cisco Unity server across the connector to a subscriber phone when the subscriber listens to messages.

About Migrating Users from Windows NT to Windows 2000

In organizations that are in the process of moving users from Windows NT 4 to Windows 2000, or from one Active Directory moving domain to a new domain, subscribers may authenticate under their old domain account during the transition period. If a tool such as the Microsoft Active Directory Migration Tool, which supports SidHistory, was used to migrate the users, then the Security Identifier (SID) from the old domain account is in the SidHistory attribute of the new account. In this case, when subscribers authenticate by using their old domain accounts, Cisco Unity recognizes the account, and subscribers have access to the ActiveAssistant and other Cisco Unity features.

However, if a tool that supports the SidHistory attribute was not used to perform the migration, when subscribers authenticate by using their old domain accounts, Cisco Unity will not recognize the account. This means that unless you explicitly provide the information about the old domain account to Cisco Unity, subscribers will not have access to the ActiveAssistant or to the Cisco Unity Visual Messaging Interface (VMI), and will not be able to use ViewMail for Outlook to record and play messages over the phone. You can provide this information in either of the following two ways:

- Create subscriber accounts by using CSV files with the Import utility, and include the column headers DOMAIN_LOCATION and NT40_ALIAS in the CSV file. See the [“Preparing for a CSV Import”](#) section on page 12-11, and the descriptions in [Table 12-4](#) for more information.
- If information about the old domain accounts is not specified in the CSV file, run the GrantUnityAccess command line utility after the subscriber accounts have been created. The utility can be found on the Cisco Unity server in the directory in which Cisco Unity was installed (the default location is C:\CommServer). Specify the following arguments:

```
GrantUnityAccess -u <Domain>\<UserAlias> -s <UnitySubscriberAlias>
```

For information about the arguments, enter:

```
GrantUnityAccess -?
```

The GrantUnityAccess utility must be run on the Cisco Unity server. The account running the utility needs to be a member of the Local Administrators group on the Cisco Unity server. Note that if the user account is in a remote domain, the domain in which Cisco Unity is running must trust the remote domain.

The GrantUnityAccess utility has additional uses. See the [“Starting the Cisco Unity Administrator on Another Server”](#) section on page 1-12 for more information.

Before Creating Subscriber Accounts

Before creating subscriber accounts, make sure that you have created necessary public distribution lists, determined subscriber account policy, and set up the appropriate classes of service and subscriber templates. See [Chapter 3, “About Subscriber Accounts”](#) for details on how to perform these tasks.

Subscriber template settings include initial Windows and phone passwords for subscribers. The default phone password is 12345 and the default Windows password is 12345678. Before you create subscriber accounts, review the Windows password policy for the domain to make sure that the minimum length for passwords does not conflict with the default Windows password specified in the subscriber template. Cisco Unity will not create subscriber accounts when the length of the password on the subscriber template is less than the minimum length for passwords in the Windows domain. When creating accounts with Exchange mailbox data, Cisco Unity preserves the existing Windows passwords.

To create subscriber accounts, refer to the following sections in this chapter for more information:

- [About the Cisco Unity Import Utility, page 12-5](#)—This section provides basic information about using the Import utility to import multiple Exchange users.
- [Running the Import Utility, page 12-8](#)—This section provides procedures for using the Import utility.
- [Using the Cisco Unity Administrator to Add or Import Subscribers, page 12-23](#)—This section provides information about using the Cisco Unity Administrator to create subscriber accounts.
- [Adding Large Numbers of Subscribers to Cisco Unity, page 12-29](#)—This section describes how to use the Exchange 5.5 Optimizer on the Cisco Unity server after adding a large number of subscribers.
- [Hiding Recipients from the Address Book, page 12-30](#)—This section describes how to hide subscribers from the Exchange address book.

Once you create subscribers, you can modify individual subscriber accounts as needed. See the [“Overview: Subscriber Settings” section on page 13-1](#) for details.

About the Cisco Unity Import Utility

You use the Cisco Unity Import utility to create multiple subscriber accounts at once, either by using information from Exchange mailboxes or from a comma-separated value (CSV) file.

There are two versions of the Import utility: one for Exchange 5.5 and one for Exchange 2000. Both versions of the utility are copied to the Cisco Unity server during Setup and stored in different folders. The shortcut on the Start > Programs > Unity menu is called “Unity Import” for both versions. When Cisco Unity is connected to an Exchange 5.5 server (which was selected during Cisco Unity Setup), the version of the Import utility that appears as a shortcut on the Programs menu can import only Exchange 5.5 users. When Cisco Unity is connected to an Exchange 2000 server, the version of the Import utility that appears as a shortcut can import both Exchange 5.5 and Exchange 2000 users.

Creating Multiple Accounts with Exchange Mailbox Data

When importing information from Exchange, the Import utility creates a maximum of 2,500 Cisco Unity subscriber accounts at once. If you have more than 2,500 Exchange users for whom you want to create Cisco Unity subscriber accounts, run the Exchange data through the utility multiple times. Once the Import utility has created a subscriber account for an Exchange user, the utility will not process the Exchange mailbox for that user when it is run again.

The Import utility can only import mailboxes from one server at a time. If you have Exchange mailboxes to import from different domains and servers, run the Import utility multiple times.

Creating Multiple Accounts with Data from a CSV File

CSV is a common text file format for moving data from one data store to another. It can be used to copy subscriber information from voice messaging systems that run on different operating systems or that have different database structures than Cisco Unity. You can edit CSV files in a text editor or in a spreadsheet application. The first row in a CSV file contains column headers that identify the type of data in the column. The information in the subsequent rows contains the subscriber information to be imported.

The Import utility processes a maximum of 2,500 records at once. When you run the Import utility, any records beyond the first 2,500 are saved to an output file that you specify during the import. If you have more than 2,500 records with which to create subscriber accounts, run the Import utility multiple times, as needed. Use the output log file from the first import as the CSV file for the next import, and so on.

About Windows accounts and Exchange mailboxes

The columns titled ALIAS and UPDATE_SUBSCRIBER_ACCOUNT work together to create subscriber accounts for:

- Users who are new and have neither a Windows account nor an Exchange mailbox. Specify 0 in the UPDATE_SUBSCRIBER_ACCOUNT column, or do not include the column in the CSV file. The ALIAS column is optional in this case.

- Users who have both a Windows account and an Exchange mailbox. Specify 1 in the UPDATE_SUBSCRIBER_ACCOUNT column and enter the Exchange alias in the ALIAS column.

For users with an existing Windows account and Exchange mailbox, you need to specify the Exchange alias in the ALIAS column so that the Import utility can find the correct Exchange mailbox to associate with the subscriber.

In organizations that are in the process of moving users from Windows NT 4 to Windows 2000, during the transition period, users may have both a Windows NT 4 account and Windows 2000 account. To allow users who have logged on by using their Windows NT 4 accounts to have access to the ActiveAssistant and to the Cisco Unity Visual Messaging Interface (VMI), and to use ViewMail for Outlook to record and play messages over the phone, the Import utility needs information about the Windows NT 4 account. You need to specify the Windows NT 4 alias in the column NT4_ALIAS and the domain name in the column DOMAIN_LOCATION so that the Import utility can find the Windows NT 4 account information to associate with the subscriber.

When Cisco Unity is connected to Exchange 2000, if the mailboxes do not already exist, they are created in the domain and OU that you specified when Cisco Unity was installed.

When Cisco Unity is connected to Exchange 5.5, if the mailboxes do not already exist, they are created in the Recipients container in the Exchange site in which Cisco Unity was installed.

Importing pager message notification information

Cisco Unity can notify a subscriber of new messages by sending an e-mail or by calling a phone, numeric pager, or text pager. Settings on the Subscribers > Subscribers > Message Notification page in the Cisco Unity Administrator allow you to control how and when Cisco Unity notifies a subscriber of new messages.

The Import utility supports a small subset of the message notification settings for numeric and text pagers. There are several column headers beginning with “PAGER1_” that allow you to specify pager numbers and other information to be used for message notification. The column headers beginning with “PAGER1_NUMERIC” are mapped to settings for the device called “Pager” listed in the Device field on the Subscribers > Subscribers > Message Notification page in the Cisco Unity Administrator. The column headers beginning with “PAGER1_TEXT” are mapped to settings for the “Text Pager 1” device. Settings for only one numeric pager and one text pager can be imported.

Message notifications to the pagers are disabled upon import and must be enabled in the Cisco Unity Administrator or by the subscriber in the ActiveAssistant. For more information about message notification settings, see the [“Subscriber Message Notification Settings”](#) section on page 13-26.

Running the Import Utility

Before running the Import utility, review the settings in the subscriber template that you will use to create the accounts. When a subscriber account is created, it contains the settings defined in the subscriber template upon which it is based. Changes to settings in a template do not affect any of the existing subscriber accounts that are based on that template.

If you need to make changes to subscriber settings after creating the subscriber accounts, you will have to change each account individually in the Cisco Unity Administrator or use the Bulk Edit utility, which can modify multiple subscriber accounts at once. The Bulk Edit utility is available in the Tools Depot, where a wide range of Cisco Unity utilities are gathered in one location. To access Tools Depot, browse to C:\CommServer\Utilities\ToolsDepot, and double-click ToolsDepot.exe. The left pane of Tools Depot lists all of the available tools by category. To display help for a tool, click the name in the left pane. To run the tool, double-click the name. See [Chapter 10, “Subscriber Template Settings”](#) for more information about subscriber templates.

If you are importing Exchange data, you also may want to print out a list of names and phone extensions for all of the Exchange users for whom you will create subscriber accounts. You may need to refer to this list during the import.

During the import, after the Import utility has examined the Exchange mailbox data or CSV source file, it displays a dialog box that reports the results of loading the source data, including the number of records found, the number of records successfully loaded, and the number of records with errors. If errors are reported, continue with the import and fix the errors later.

To create Cisco Unity subscribers by using the Import utility

If you are importing from a CSV file, see the [“Preparing for a CSV Import”](#) section on page 12-11 before beginning this procedure.

-
- Step 1** On the Cisco Unity server, on the Windows Start menu, click **Programs > Cisco Unity > Unity Import**.
- Step 2** Follow the on-screen instructions.
-

Use the following tables to learn more about the dialog boxes in the Import utility.

Table 12-1 Choose Type of Import Dialog Box

Field	Considerations
Comma-Separated Value (CSV) File	Check this box to have the Import utility translate a comma-separated value (CSV) file into Cisco Unity subscriber accounts. The CSV file can be created from user information from another voice messaging system or database.
MS Exchange Server	Check this box to have the Import utility create Cisco Unity subscriber accounts directly from Microsoft Exchange mailbox data. When Cisco Unity is connected to an Exchange 5.5 server, you must specify an Exchange 5.5 server. When Cisco Unity is connected to an Exchange 2000 server, you can specify either an Exchange 5.5 or Exchange 2000 server.

Table 12-2 Enter Import Information Dialog Box

Field	Considerations
Choose Source CSV File (<i>CSV imports only</i>)	Enter the location of the source CSV file containing data you want to import (the default is input.csv). You do not need to choose a source CSV file when importing Exchange data.
Save Output Log File As (<i>CSV imports only</i>)	Enter a location where the Import utility will save the output log file (the default is output.log). This file does not include records with errors. This file contains only records the utility could not import for any of these reasons: you selected not to import them; you tried to import more than 2,500 records; or the import process was interrupted. The output log file can be edited and used again as a CSV source file.

Table 12-2 Enter Import Information Dialog Box (continued)

Field	Considerations
Subscriber Template	<p>Select the Cisco Unity subscriber template that best serves the subscribers whose records you are importing. Attributes in a subscriber template are applied to any new subscriber accounts. You can only specify one template for each run of the Import utility. To use more than one template, you must run the Import utility multiple times.</p> <p>If column headers in a source CSV file used for import correspond to attributes in the subscriber template, the values in the CSV file override the template values.</p> <p>For example, if the Import utility detects a column header in the source file called COS_NAME, each subscriber is assigned to the class of service (COS) named in this column. If no COS with that name exists in Cisco Unity, the Import utility creates a new COS with the name specified in the CSV file. The new COS is a copy of the COS specified in the active subscriber template.</p>
Error Log File	<p>Enter a location where the Import utility will save the error log file (the default is error.log). This file contains data that the Import utility could not import because of errors in the source file.</p> <p>When importing from a CSV file, the error log file can be corrected and used again as a CSV source file.</p>
Domain <i>(Exchange 2000 imports only)</i>	Select the domain from which to import subscribers.
Exchange Server	When importing Exchange mailbox data, select the Exchange server from which you would like to import subscribers.
Import Mail Users as Subscribers <i>(Exchange imports only)</i>	Select this option to indicate you would like to import traditional Exchange mail users into Cisco Unity.
Import Custom Recipients as Internet Subscribers <i>(Exchange imports only)</i>	Select this option if you would like to import custom recipients (known as mail-enabled contacts in Exchange 2000/Active Directory) from Exchange into Cisco Unity. Custom recipients are Exchange users who do not have message stores on Exchange. They can be imported as Internet subscribers, and will be able to receive voice messages at their e-mail addresses.

Table 12-3 Prepare Data Dialog Box

Field	Considerations
Selected	Uncheck the box of any record that you do not want to import. When importing from a CSV file, the Import utility saves the records that you do not import in the output log file.
DTMF_ACCESS_ID <i>(Exchange imports only)</i>	<p>The numbers in the DTMF_ACCESS_ID column will be used for subscriber extensions. Confirm that all subscriber extensions are set correctly, and change them if necessary. If the column is blank, enter the subscriber extensions.</p> <p>When Cisco Unity is connected to an Exchange 5.5 server, the Import utility uses the value in the Business field on the Phone/Notes tab in the Exchange mailbox as the subscriber extension. When Cisco Unity is connected to an Exchange 2000 server, the Import utility uses the Telephone number field on the General tab of the user properties.</p> <p>Cisco Unity subscriber extensions must be dialable characters and cannot contain alphabetic or symbolic characters. The Import utility displays an error message box and will not proceed with the import when invalid characters are entered in the DTMF_ACCESS_ID column.</p>

Preparing for a CSV Import

The first row in a CSV file must contain column headers that identify the type of data in the column. The information in the subsequent rows contains the subscriber information to be imported. There are many column headers that you can include in the CSV file, but only three are required, and they must be entered in the order shown in the following example:

```
LAST_NAME, FIRST_NAME, DTMF_ACCESS_ID
Abade, Alex, 2001
Bader, Kelly, 2002
Campbell, Terry, 2003
Cho, Li, 2004
```

Note also that the column headers must be in uppercase. See [Table 12-4](#) for a list of the valid column headers.

Be aware that Exchange alias generation is determined by settings on the subscriber template used during the import; the settings in Exchange for alias name generation are not used.

When importing information for regular and Internet subscribers, use a separate CSV file for each type of subscriber. Mixing the subscriber types in one CSV file produces erroneous results such as regular subscribers being imported as Internet subscribers.

To prepare a CSV file for importing regular subscribers

- Step 1** In the database that contains the data which you will use to create Cisco Unity accounts, save the data as a CSV file.
- Step 2** Open the CSV file in a spreadsheet application or another application in which you can edit the data.
- Step 3** In the first row, create column headers. The file must contain at least these three column headers in this order:
LAST_NAME, FIRST_NAME, DTMF_ACCESS_ID.
- All column headers must be in uppercase and spelled as shown in [Table 12-4](#).
 - Separate values by commas. Do not use a tab, spaces, or a semicolon to separate values in the file.
- Step 4** If the file contains columns of data you do not want to import, title those columns JUNK, and the Import utility will ignore them. The Import utility also ignores any columns titled NOTES.
- Step 5** Confirm that each row contains the appropriate data corresponding to each column header.
- Step 6** Save the data as a CSV file. This is the CSV file you will use during the import.
- Step 7** Continue with the procedure in the [“Running the Import Utility”](#) section on [page 12-8](#).
-

To prepare a CSV file for importing Internet subscribers

-
- Step 1** Prepare the CSV file for import as documented in the procedure, [To prepare a CSV file for importing regular subscribers, page 12-12](#). Note that although the DTMF_ACCESS_ID column header must appear in the CSV file, this column is optional for Internet subscribers. In other words, each row of data for an Internet subscriber may or may not have a number for the DTMF_ACCESS_ID.
- Step 2** Add a column header called SUBSCRIBER_TYPE and enter **2** in this column in each row of subscriber data.
- Step 3** Add a column header called REMOTE_ADDRESS and enter a subscriber e-mail address in this column for each row of subscriber data.
- Step 4** Continue with the procedure in the [“Running the Import Utility” section on page 12-8](#).
-

Table 12-4 CSV File Column Headers

CSV File Column Headers	Description
LAST_NAME <i>(required)</i>	Subscriber last name. This must be the first column header in the CSV file. Enter any combination of letters and numbers, up to a maximum of 25 characters.
FIRST_NAME <i>(required)</i>	Subscriber first name. This must be the second column header in the CSV file. Enter any combination of letters and numbers, up to a maximum of 25 characters.
DTMF_ACCESS_ID <i>(required)</i>	The ID callers enter to reach a subscriber (usually the same as the extension). This must be the third column header in the CSV file. When importing Internet subscribers, this column header is required in the CSV file even though the column may not contain any data. After this column, the column headers can appear in any order. Enter any combination of digits from 0 to 9, up to a maximum of 64 digits.

Table 12-4 CSV File Column Headers (continued)

CSV File Column Headers	Description
ALIAS <i>(required when importing users with an existing Windows 2000 account and Exchange mailbox)</i>	<p>This column and the UPDATE_SUBSCRIBER_ACCOUNT column work together as follows:</p> <p>UPDATE_SUBSCRIBER_ACCOUNT is 0</p> <p>When creating accounts for users who have neither a Windows account nor an Exchange mailbox, the ALIAS column is optional. If you do not specify an alias here, the Exchange alias is derived from a rule specified in the subscriber template, using a combination of first and last name. Typically, you enter an alias here to override the alias generation rule 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>UPDATE_SUBSCRIBER_ACCOUNT is 1</p> <p>When importing users who already have Windows accounts and Exchange mailboxes, the Import utility searches for the Exchange mailbox that matches the alias entered here. The matching Exchange mailbox will be associated with the subscriber account.</p> <p>Enter any combination of letters and numbers, up to a maximum of 64 characters.</p>
AUDIO_SPEED	<p>Defines the speed of message playback.</p> <ul style="list-style-type: none"> • 0—low speed. • 100—medium speed (default value). • 200—fast speed.
AUDIO_VOLUME	<p>Indicates the volume for message playback.</p> <ul style="list-style-type: none"> • 0—low volume. • 50—medium volume (default value). • 100—high volume.
COS_OBJECT_ID	<p>The name of the subscriber class of service (COS) of which the subscriber will be a member.</p> <p>Enter any combination of letters and numbers, up to a maximum of 64 characters.</p>

Table 12-4 CSV File Column Headers (continued)

CSV File Column Headers	Description
DOMAIN_LOCATION	<p>Specifies the Windows NT 4.0 domain name in which the alias in the NT40_ALIAS column can be found. With information from the Windows NT 4 accounts, the subscriber accounts are created such that users who are logged on by using their Windows NT 4 accounts have access to the ActiveAssistant and the Cisco Unity Visual Messaging Interface (VMI), and can use ViewMail for Outlook to record and play messages over the phone.</p> <p>Use this column only when you will be creating subscriber accounts for users who have both a Windows NT 4 account and Windows 2000 account. In addition, you need to specify the alias in the column NT40_ALIAS so that the Import utility can find the Windows NT 4 account information to associate with the subscriber.</p>
JUNK	<p>The Import utility ignores columns with this header. JUNK is interchangeable with the header NOTES.</p> <p>Enter any comments that you may have for this record.</p>
LIST_IN_DIRECTORY	<p>Determines whether the subscriber is listed in the phone directory.</p> <ul style="list-style-type: none"> • 0—turns list in directory off. • 1—turns list in directory on.
MAX_MSG_LENGTH	<p>Indicates the maximum length of voice mail messages (in seconds) that outside callers can leave.</p> <p>Enter any value from 0 to 999 seconds.</p>
MWI_EXTENSION	<p>The message waiting indicator (MWI) extension, if different from phone extension for the subscriber.</p> <p>Enter any combination of digits from 0 to 9 for the extension, and “;” (comma) or “;” (semi-colon) for pause.</p>
NOTES	<p>The Import utility ignores columns with this header. NOTES is interchangeable with the header JUNK.</p> <p>Enter any comments that you may have for this record.</p>

Table 12-4 CSV File Column Headers (continued)

CSV File Column Headers	Description
NT40_ALIAS	<p>Specifies the Windows NT 4.0 alias. Specify this field to allow users who are logged on by using their Windows NT 4 accounts to have access to the ActiveAssistant and the Cisco Unity Visual Messaging Interface (VMI), and to use ViewMail for Outlook to record and play messages over the phone.</p> <p>Use this column only when you will be creating subscriber accounts for users who have both a Windows NT 4 account and a Windows 2000 account. In addition, you need to specify the domain name in the column DOMAIN_LOCATION so that the Import utility can find the Windows NT 4 account information to associate with the subscriber.</p>
PAGER1_NUMERIC_AFTER_DIALDIGITS	<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 > Subscribers > Message Notification page in the Cisco Unity Administrator.</p> <p>Enter any combination of digits from 0 to 9.</p>
PAGER1_NUMERIC_DIAL_DELAY	<p>Specifies the number of seconds to wait before dialing the extra digits specified in the PAGER1_NUMERIC_AFTER_DIALDIGITS 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 > Subscribers > Message Notification page in the Cisco Unity Administrator.</p> <p>Enter any value from 0 to 100 seconds.</p>

Table 12-4 CSV File Column Headers (continued)

CSV File Column Headers	Description
PAGER1_NUMERIC_ PHONE_NO	<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 > Subscribers > Message Notification page in the Cisco Unity Administrator. Message notifications to this device are disabled upon import and must be enabled in the Cisco Unity Administrator or by the subscriber in the ActiveAssistant.</p> <p>Enter any combination of digits 0 through 9 and the following dialing characters:</p> <ul style="list-style-type: none"> • , (comma) to insert a one-second pause. • # and * to correspond to the # and * keys on the phone. <p>Note that the restriction table specified in the subscriber class of service for Outcalling is not applied during the import. The number that you specify here is imported.</p>
PAGER1_TEXT_SMTP_ ADDRESS (text pagers only)	<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 > Subscribers > Message Notification page in the Cisco Unity Administrator. Message notifications to this device are disabled upon import and must be enabled in the Cisco Unity Administrator or by the subscriber in the ActiveAssistant.</p> <p>Enter any combination of letters and numbers, up to a maximum of 128 characters.</p>

Table 12-4 CSV File Column Headers (continued)

CSV File Column Headers	Description
PAGER1_TEXT_AFTER_DIALDIGITS <i>(text pagers 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 > Subscribers > Message Notification page in the Cisco Unity Administrator.</p> <p>Enter any combination of letters and numbers, up to a maximum of 40 characters.</p>
PRIMARY_FAX_NUMBER	<p>When Cisco Unity is integrated with a third-party fax server, this is the ID that callers enter to send faxes to a subscriber. Defines the FAX_ID field on the subscriber profile page.</p> <p>Enter any combination of digits from 0 to 9, up to a maximum of 64 digits.</p>
REMOTE_ADDRESS <i>(required for Internet subscribers)</i>	<p>Specifies the e-mail (SMTP) address to which messages to Internet subscribers will be sent.</p>
SUBSCRIBER_TYPE <i>(required for Internet subscribers)</i>	<p>Defines the type of subscriber being imported. When importing information for regular and Internet subscribers, use a separate CSV file for each type of subscriber. Mixing the subscriber types in one CSV file produces erroneous results such as regular subscribers being imported as Internet subscribers.</p> <p>Note that this field is required for Internet subscribers.</p> <ul style="list-style-type: none"> • 1—creates an Exchange subscriber. • 2—creates an Internet (SMTP) subscriber.

Table 12-4 CSV File Column Headers (continued)

CSV File Column Headers	Description
UPDATE_SUBSCRIBER_ACCOUNT	<p>Indicates whether a Windows account and Exchange mailbox should be created during the import. If this column is absent from the CSV file, the Import utility creates the Windows account and Exchange mailbox. This column works with the ALIAS column as follows:</p> <p>UPDATE_SUBSCRIBER_ACCOUNT is 0 Creates the Windows account and Exchange mailbox as the subscriber account is created. Specify 0 when the user is new and has neither a Windows account nor an Exchange mailbox.</p> <p>UPDATE_SUBSCRIBER_ACCOUNT is 1 Uses an existing Windows account and Exchange mailbox for the subscriber. Specify 1 when both the Windows account and the Exchange mailbox exist. In order for the Import utility to locate the Exchange mailbox to use for the subscriber, you must enter the alias in the ALIAS column.</p>
USE_BRIEF_PROMPTS	<p>Indicates whether the subscriber prefers brief or full menus.</p> <ul style="list-style-type: none"> • 0—turns brief menus on. • 1—turns full menus on.
XFER_ANNOUNCE	<p>Defines whether Cisco Unity says “transferring call” when the phone is answered on an incoming external call. For this to work, XFER_TYPE must be set to “supervised.”</p> <ul style="list-style-type: none"> • 0—turns transfer announce off. • 1—turns transfer announce on.
XFER_CONFIRM	<p>Defines whether Cisco Unity asks subscribers if they would like to take calls. For this to work, XFER_TYPE must be set to “supervised.”</p> <ul style="list-style-type: none"> • 0—turns transfer confirm off. • 1—turns transfer confirm on.

Table 12-4 CSV File Column Headers (continued)

CSV File Column Headers	Description
XFER_HOLDING_MODE	<p>Determines if 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"> • 0—turns transfer holding mode off. • 1—turns transfer holding mode on.
XFER_INTRODUCE	<p>Defines whether subscribers hear “call for <the recorded voice name of the subscriber>,” or “call for <extension number>” when they answer an incoming external call. 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"> • 0—turns transfer introduce off. • 1—turns transfer introduce on.
XFER_RINGS	<p>When doing a supervised transfer, the number of rings to wait before activating the appropriate 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"> • 0—turns transfer screening off. • 1—turns transfer screening on. • 2—turns transfer screening on with memory.

Table 12-4 CSV File Column Headers (continued)

CSV File Column Headers	Description
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"> 0—unsupervised transfer; Cisco Unity does not monitor call progress. 1—supervised transfer; Cisco Unity monitors call progress.
ZERO_REVERT	<p>Specifies the display name for the call handler to which calls to this subscriber are transferred when outside callers press “0” during the subscriber greeting. This allows calls to different groups of subscribers to be handled by different operators. Note that the Import utility checks to see if the name is a valid call handler, so the call handler must have been created before doing the import.</p> <p>Enter any combination of letters and numbers, up to a maximum of 64 characters.</p>

Correcting Import Errors

To correct errors, you use the error log file that you specified during the import. The error log file contains data that the Import utility could not import because of Exchange mailbox or CSV file errors. The Import utility reports the first error it detects in any Exchange mailbox or row in a CSV file. Once you correct that error, the Import utility may detect additional errors in the same mailbox or row when the data is imported again. You may need to repeat the process—running the Import utility and correcting an error—several times to find and correct all errors.

The first column of the error log file, titled NOTES, provides an error code that describes the error found in a record. The second column of the error log file (also titled NOTES) lists the column number in which the error can be found. Data columns are numbered sequentially beginning with one. You will also see the word ERROR next to the data item that contains the error.

To correct Exchange mailbox errors

Step 1 Go to the directory location of the error log file you specified during the import.

- Step 2** Use a spreadsheet application to open and print the error log file. The error log file lists the first name and last name of the user for each Exchange mailbox that contains an error.
- Step 3** When importing from Exchange 5.5, open the **Microsoft Exchange Administrator**. When importing from Exchange 2000, open **Windows Active Directory Users and Computers**.
- Step 4** Double-click an Exchange mailbox that contains an error to see the properties.
- Step 5** Enter corrections in the appropriate boxes in the Exchange mailbox.
- Step 6** Click **OK**.
- Step 7** Repeat [Step 4](#) through [Step 6](#) for each Exchange mailbox listed in the error log file.
- Step 8** Run the Import utility again.
-

To correct CSV file errors

- Step 1** Go to the directory location of the error log file you specified during the import.
- Step 2** Use a spreadsheet application to open and print 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.
- Step 4** Use a spreadsheet application 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. This is your new source file.
- Step 7** Run the Import utility again with the CSV source file that you saved in [Step 6](#).
-

Using the Cisco Unity Administrator to Add or Import Subscribers

Within the Cisco Unity Administrator, you can create subscriber accounts one at a time by either adding a subscriber or importing a user from Exchange.

Before creating subscriber accounts, review the settings in the subscriber template that you will use to create the accounts. Note that changes to settings in a template do not affect any of the existing subscriber accounts that were based on that template. See [Chapter 10, “Subscriber Template Settings”](#) for more information.

Adding New Subscribers

When Cisco Unity is connected to Exchange 2000, and you add a subscriber, the subscriber mailbox is created in the domain and organizational unit (OU) that you specified when Cisco Unity was installed. If you want the subscriber mailbox to be in another domain, create the Windows account and mailbox first, and then import the user into Cisco Unity.

You can add the following types of subscribers:

- **New Exchange Subscriber**—When adding a new Exchange subscriber, Cisco Unity creates a Windows account and an Exchange mailbox for the subscriber as the subscriber account is created. Windows accounts created by Cisco Unity have limited rights and permissions, which you can modify in Windows as needed.
- **New Internet Subscriber**—Internet subscribers do not have Exchange mailboxes. Instead, messages for the subscriber are sent to an e-mail address that you supply when creating the account. An Internet subscriber is equivalent to a mail-enabled contact in Exchange 2000/Active Directory and a custom recipient in Exchange 5.5.
- **New AMIS Subscriber**—Voice messages for AMIS subscribers are sent to another voice messaging system using the Remote Mailbox Number and the AMIS delivery location that you supply.
- **New Bridge Subscriber**—Bridge subscribers are individuals who use an Octel voice messaging system. They are Cisco Unity subscribers, but voice messages addressed to them are sent to their voice messaging system by using the Cisco Unity Bridge.

Refer to the *Networking in Cisco Unity* guide for detailed information about Internet, AMIS, and Bridge subscribers. The *Networking in Cisco Unity* guide is available on Cisco.com at

http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/unity31/net/index.htm.

To add a new subscriber

- 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**, **New Internet Subscriber**, **New AMIS Subscriber**, or **New Bridge Subscriber**.
- Step 4** Enter the appropriate information on the Add Subscriber page.
- Step 5** Click **Add**.
- Step 6** On the subscriber record, customize settings as appropriate, and then click the **Save** icon.
-

Importing Existing Exchange Users

You can import users from Exchange 2000/Active Directory or from Exchange 5.5. You can import the following types of users:

- Non Internet Subscriber—This is simply a user with an Exchange mailbox.
- Internet subscriber—An Internet subscriber is equivalent to a mail-enabled contact in Exchange 2000/Active Directory and a custom recipient in Exchange 5.5.

To import an Exchange user

- 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 whether to import a **Non Internet Subscriber** (a user with an Exchange mailbox) or an **Internet Subscriber** (an Exchange 2000 mail-enabled contact or an Exchange 5.5 custom recipient).
- Step 6** Indicate whether to search by first name, last name, or Exchange alias. When Cisco Unity is connected to an Exchange 2000 server, you can also indicate the domain for the search.
- Step 7** Enter the appropriate name or alias. You also can enter * to display a list of all mail 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 Exchange user to import.
- Step 10** Enter the appropriate information on the Add Subscriber page.
- Step 11** Click **Add**.
- Step 12** On the subscriber record, customize settings as appropriate, and then click the **Save** icon.
-

Use the following table to learn more about the settings on the Add Subscriber page.

Table 12-5 Add Subscriber Page

Field	Considerations
Type	<p>Choose one of these options:</p> <ul style="list-style-type: none"> • New Exchange Subscriber—When Cisco Unity creates the subscriber account, it also creates a Windows account and an Exchange mailbox for the subscriber. A subscriber is also an Active Directory user, and has an Exchange mailbox in which Cisco Unity stores voice messages. The user object for the subscriber in Active Directory or the Exchange 5.5 directory contains Cisco Unity-specific attributes. • Import Existing Exchange User—Click Select to choose the Exchange user to import. When Cisco Unity creates the subscriber account, it uses the existing Exchange mailbox. Cisco Unity-specific attributes are written to the existing directory user object. • New Internet Subscriber—Internet subscribers do not have mailboxes on the local Exchange network. When Cisco Unity creates the Internet subscriber account, it creates an Active Directory contact (or Exchange 5.5 custom recipient) with Cisco Unity-specific attributes. • New AMIS Subscriber—AMIS subscribers are individuals who use a voice messaging system other than Cisco Unity. They are Cisco Unity subscribers, but voice messages addressed to them are sent to their voice messaging system by using the AMIS analog protocol. When Cisco Unity creates the AMIS subscriber account, it creates an Active Directory contact (or Exchange 5.5 custom recipient) with Cisco Unity-specific attributes. • New Bridge Subscriber—Bridge subscribers are individuals who use an Octel voice messaging system. They are Cisco Unity subscribers, but voice messages addressed to them are sent to their voice messaging system by using the Cisco Unity Bridge. When Cisco Unity creates the Bridge subscriber account, it creates an Active Directory contact (or Exchange 5.5 custom recipient) with Cisco Unity-specific attributes.
First Name/Last Name	<p>Enter the first and last names of the subscriber. The names entered here are used for directory assistance.</p> <p>When importing an existing Exchange user, these fields are filled in automatically.</p>

Table 12-5 Add Subscriber Page (continued)

Field	Considerations
Display Name	<p>Cisco Unity creates a default display name for the subscriber, which you can modify. This is the subscriber name as displayed in the Cisco Unity Administrator, Exchange, Windows, and subscriber reports. In most cases, only the first 40 characters are displayed.</p> <p>When importing an existing Exchange user, the Display Name is filled in automatically.</p>
Extension	<p>Enter the number that callers dial to reach the subscriber. Enter numerals only, according to the extension numbering plan for your organization. Each extension associated with the Cisco Unity server must be unique. Cisco Unity checks whether the extension has already been assigned to another subscriber, call handler, or any other entity that accepts extensions. If the extension is in use, you are prompted for another extension.</p>
Fax ID	<p>Enter the number that callers dial to send a fax to the subscriber.</p> <p>The Fax ID in a subscriber account maps to the Fax box on the Phone/Notes property page in the subscriber Microsoft Exchange mailbox. When you import subscribers who have Exchange mailboxes, this value is copied from Exchange into Cisco Unity. If you change this value in Cisco Unity, it is copied to the Exchange mailbox.</p>
Template	<p>Select the template on which to base the new subscriber account. The template affects most subscriber settings.</p>
Alias	<p>Cisco Unity creates a default alias based on rules for aliases on the Subscribers > Subscriber Template > Profile page.</p> <p>Note that changing the setting in the Template box on this page can change the alias, if you choose a template that has a different rule for aliases.</p> <p>When you click Add, Cisco Unity checks whether the alias is unique. If the alias is in use, you are prompted to provide a new one.</p>

Table 12-5 Add Subscriber Page (continued)

Field	Considerations
Exchange Server <i>(for Exchange users only)</i>	<p>Select the Exchange server (also referred to as the home server) on which the subscriber messages are stored. When Cisco Unity is connected to an Exchange 5.5 server, you can only select an Exchange 5.5 home server. When Cisco Unity is connected to an Exchange 2000 server, you can select either an Exchange 5.5 or an Exchange 2000 server.</p> <p>Assign subscribers to the Exchange server that is on the Cisco Unity server only in the following circumstances: if Cisco Unity is a stand-alone server, if the subscribers access Cisco Unity only by phone, or if there are fewer than 200 subscribers. Otherwise, assign subscribers to another Exchange server.</p> <p>When you specify any server other than the Cisco Unity server as the home Exchange server for a subscriber, it may be several minutes before the subscriber can access the account. With Exchange 5.5 servers, once the account is accessible, the subscriber must log on before messages can be left.</p>
Mailstore <i>(for Exchange 2000 only)</i>	Select the mailbox store on which the subscriber messages are stored.
SMTP address <i>(for Internet subscribers only)</i>	Enter the e-mail (SMTP) address assigned to the Internet subscriber. Internet subscribers do not have mailboxes. Instead, messages for the subscriber are sent to this e-mail address. (An Internet subscriber is equivalent to a mail-enabled contact in Exchange 2000/Active Directory and a custom recipient in Exchange 5.5.)
AMIS Remote Mailbox Number <i>(for AMIS subscribers only)</i>	Enter the mailbox number that the remote voice messaging system uses to route AMIS messages to this subscriber.
AMIS Location <i>(for AMIS subscribers only)</i>	Select the AMIS location that the AMIS subscriber is associated with. The AMIS location you specify corresponds to the voice messaging system that this AMIS subscriber uses. The Delivery Phone Number for the AMIS location is used for outgoing messages to this subscriber. In installations with two or more Cisco Unity servers, only AMIS delivery locations that have been created on this Cisco Unity server are displayed in the list.

Table 12-5 Add Subscriber Page (continued)

Field	Considerations
Bridge Remote Mailbox Number <i>(for Bridge subscribers only)</i>	Enter the mailbox number that the remote voice messaging system uses to route messages to this Bridge subscriber.
Bridge Location <i>(for Bridge subscribers only)</i>	Select the Bridge location that the Bridge subscriber is associated with. The Bridge location you specify corresponds to the Octel system that this Bridge subscriber uses. In installations with two or more Cisco Unity servers, only Bridge delivery locations that have been created on this Cisco Unity server are displayed in the list.

Adding Large Numbers of Subscribers to Cisco Unity

The information in this section applies only to Cisco Unity servers that are connected to Exchange 5.5. It is not problematic to add a large number of subscribers to Cisco Unity when the server is connected to Exchange 2000.

When you add large numbers of subscribers (more than 100) to Cisco Unity, run the Exchange 5.5 Optimizer on the Cisco Unity server after adding the subscribers. Otherwise, you may encounter problems with Cisco Unity not accepting dialed extensions for subscribers and call handlers, and with conversation-related errors in the event log.

If there are other Exchange servers in the site, you do not need to run Exchange Optimizer on the other Exchange servers.

To run Exchange 5.5 Optimizer on the Cisco Unity server

- Step 1** Shut down the Cisco Unity server, if it is running.
- Step 2** On the Windows Start menu, click **Programs > Microsoft Exchange > Microsoft Exchange Optimizer**.
- Step 3** Follow the on-screen instructions. If Exchange Optimizer recommends that you move files, you can safely choose not to do so.
- Step 4** If the Exchange 5.5 Optimizer displays an error message saying that a service could not be shut down, perform the following actions:

- Exit the **Exchange Optimizer**.
- Right-click the **Cisco Unity** icon in the status area of the taskbar, and click **Exit**.
- Start the **Exchange Optimizer** and follow the on-screen instructions.

Step 5 When Exchange Optimizer is finished, restart the Cisco Unity server.

Hiding Recipients from the Address Book

In the Microsoft Exchange 5.5 Administrator, you can choose to hide mailboxes, custom recipients, and distribution lists from the Exchange address book. Similarly, in Windows Active Directory for Users and Computers, you can hide users and groups from Exchange address lists (select View > Advanced Features to see the Exchange Advanced property page). Even when recipients are hidden, Cisco Unity is able to deliver messages to them. You may want to use this setting, for example, when creating Cisco Unity subscriber accounts for voice mail-only users. Hiding voice mail-only subscribers from the Address Book helps to prevent their mailboxes from filling up with e-mail that they cannot access and delete.