



APPENDIX **A**

Using the Cisco Unity Connection 8.x Bulk Administration Tool

The Cisco Unity Connection Bulk Administration Tool (BAT) allows you to create, update, and delete multiple user accounts, contacts, distribution lists, distribution list members, or unified messaging accounts by importing information contained in a comma separated value (CSV) file. In addition, it allows you to export information about users, contacts, distribution lists, or unified messaging accounts from Cisco Unity Connection to a CSV file. When Connection is running as part of Cisco Unified Communications Manager Business Edition (CMBE), you cannot create, update, or delete users with BAT. Modifications to users must be done in Cisco Unified Communications Manager Administration.

CSV is a common text file format for moving data from one data store to another. For example, importing from a CSV file can be useful for transferring information from a corporate directory to Cisco Unity Connection. Transferring the information allows users with voice mailboxes to add corporate directory users who are not Connection users to their address books and to then create call-routing rules based on calls from such contacts.

See the following sections for detailed information and instructions on using BAT:

- [Creating User Accounts in Cisco Unity Connection 8.x, page A-2](#)
- [Creating Contacts in Cisco Unity Connection 8.x, page A-3](#)
- [Creating System Distribution Lists in Cisco Unity Connection 8.x, page A-3](#)
- [Creating System Distribution List Members in Cisco Unity Connection 8.x, page A-4](#)
- [Creating Unified Messaging Accounts in Cisco Unity Connection 8.5 and Later, page A-5](#)
- [Updating User Accounts in Cisco Unity Connection 8.x, page A-6](#)
- [Updating Contacts in Cisco Unity Connection 8.x, page A-7](#)
- [Updating System Distribution Lists in Cisco Unity Connection 8.x, page A-7](#)
- [Updating Unified Messaging Accounts in Cisco Unity Connection 8.5 and Later, page A-8](#)
- [Deleting User Accounts in Cisco Unity Connection 8.x, page A-9](#)
- [Deleting Contacts in Cisco Unity Connection 8.x, page A-9](#)
- [Deleting System Distribution Lists in Cisco Unity Connection 8.x, page A-10](#)
- [Deleting System Distribution List Members in Cisco Unity Connection 8.x, page A-11](#)
- [Deleting Unified Messaging Accounts in Cisco Unity Connection 8.5 and Later, page A-11](#)
- [Exporting Users to a CSV File in Cisco Unity Connection 8.x, page A-12](#)
- [Exporting Contacts to a CSV File in Cisco Unity Connection 8.x, page A-13](#)

- [Exporting Users from an LDAP Directory to a CSV File in Cisco Unity Connection 8.x](#), page A-13
- [Exporting System Distribution Lists to a CSV File in Cisco Unity Connection 8.x](#), page A-14
- [Exporting System Distribution List Members to a CSV File in Cisco Unity Connection 8.x](#), page A-14
- [Exporting Unified Messaging Accounts to a CSV File in Cisco Unity Connection 8.5 and Later](#), page A-15
- [Constructing the Input CSV Files in Cisco Unity Connection 8.x](#), page A-15
- [Correcting Errors by Using the Failed Objects File in Cisco Unity Connection 8.x](#), page A-45

Creating User Accounts in Cisco Unity Connection 8.x

**Note**

The information in this section is not applicable to creating user accounts in Cisco Unified Communications Manager Business Edition (CMBE). See the [“Creating Cisco Unity Connection 8.x User Accounts in a Cisco Unified Communications Manager Business Edition \(CMBE\) Configuration”](#) section on page 8-1.

BAT allows you to create Cisco Unity Connection user accounts (with or without voice mailboxes) from a CSV file. See the [“Constructing the Input CSV Files in Cisco Unity Connection 8.x”](#) section on page A-15 as you create the CSV file.

**Note**

Before you use BAT to add voicemail users to the system, confirm that the required Connection licenses are available for the new user accounts. You can view the number of licenses purchased, and the number that are used and unused on your system, from Cisco Unity Connection Administration. If you need additional licenses, contact your reseller.

To Create User Accounts

- Step 1** In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.
- Step 2** On the Bulk Administration Tool page, in the Select Operation section, select **Create**.
- Step 3** In the Select Object Type section, select the applicable option:
 - Select **Users** to create users without voice mailboxes.
 - Select **Users With Mailbox** to create accounts with mailboxes.
- Step 4** In the Override CSV Fields When Creating User Accounts section, select the applicable option.
- Step 5** In the Select File section, in the CSV File field, enter the full path.

**Note**

If you are importing a CSV file that you created by exporting data from Connection, you may need to manually create the following column headers, if applicable, and manually enter data, as these column headers are not included in an export: TemplateAlias, Password, and PIN.

- Step 6** In the Failed Objects Filename field, enter the name of the failed objects report file. For example, enter **errors.csv**.
- Step 7** Select **Submit**.

BAT begins creating user accounts and displays the summary page when the operation has completed. If the operation results in any failures, you can immediately inspect the failed objects report file by selecting Download the Failed Objects File. For information about correcting errors, see the [“Correcting Errors by Using the Failed Objects File in Cisco Unity Connection 8.x”](#) section on page A-45.

Creating Contacts in Cisco Unity Connection 8.x

BAT allows you to create Cisco Unity Connection contacts from a CSV file. See the [“Constructing the Input CSV Files in Cisco Unity Connection 8.x”](#) section on page A-15 as you create the CSV file.

To Create Contacts

-
- Step 1** In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.
 - Step 2** On the Bulk Administration Tool page, in the Select Operation section, select **Create**.
 - Step 3** In the Select Object Type section, select **System Contacts**.
 - Step 4** In the Select File section, in the CSV File field, enter the full path to the CSV input file.



Note If you are importing a CSV file that you created by exporting data from Connection, you may need to manually create the ContactTemplateAlias column header, if applicable, and manually enter data, as this column header is not included in an export.

- Step 5** In the Failed Objects Filename field, enter the name of the failed objects report file. For example, enter **errors.csv**.
- Step 6** Select **Submit**.

BAT begins creating contacts and displays the summary page when the operation has completed.

If the operation results in any failures, you can immediately inspect the failed objects report file by selecting Download the Failed Objects File. For information about correcting errors, see the [“Correcting Errors by Using the Failed Objects File in Cisco Unity Connection 8.x”](#) section on page A-45.

Creating System Distribution Lists in Cisco Unity Connection 8.x



Note The information in this section is not applicable to creating system distribution lists in Cisco Unified Communications Manager Business Edition (CMBE).

BAT allows you to create Cisco Unity Connection system distribution lists from a CSV file. See the [“Constructing the Input CSV Files in Cisco Unity Connection 8.x”](#) section on page A-15 as you create the CSV file.

To Create System Distribution Lists

-
- Step 1** In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.
- Step 2** On the Bulk Administration Tool page, in the Select Operation section, select **Create**.
- Step 3** In the Select Object Type section, select **Distribution Lists**.
- Step 4** In the Select File section, in the CSV File field, enter the full path of the applicable CSV file, or select **Browse** and locate the file.
- Step 5** In the Failed Objects Filename field, enter the name of the failed objects report file. For example, enter **errors.csv**.
- Step 6** Select **Submit**.
- BAT begins creating distribution lists and displays the summary page when the operation has completed.
- If the operation results in any failures, you can immediately inspect the failed objects report file by selecting **Download the Failed Objects File**. For information about correcting errors, see the [“Correcting Errors by Using the Failed Objects File in Cisco Unity Connection 8.x” section on page A-45](#).
-

Creating System Distribution List Members in Cisco Unity Connection 8.x

**Note**

The information in this section is not applicable to creating system distribution list members in Cisco Unified Communications Manager Business Edition (CMBE).

BAT allows you to create Cisco Unity Connection system distribution lists from a CSV file. See the [“Constructing the Input CSV Files in Cisco Unity Connection 8.x” section on page A-15](#) as you create the CSV file.

To Create System Distribution List Members

-
- Step 1** In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.
- Step 2** On the Bulk Administration Tool page, in the Select Operation section, select **Create**.
- Step 3** In the Select Object Type section, select **Distribution List Members**.
- Step 4** In the Select File section, in the CSV File field, enter the full path of the applicable CSV file, or select **Browse** and locate the file.
- Step 5** In the Failed Objects Filename field, enter the name of the failed objects report file. For example, enter **errors.csv**.
- Step 6** Select **Submit**.
- BAT begins creating distribution list members and displays the summary page when the operation has completed.

If the operation results in any failures, you can immediately inspect the failed objects report file by selecting **Download the Failed Objects File**. For information about correcting errors, see the [“Correcting Errors by Using the Failed Objects File in Cisco Unity Connection 8.x”](#) section on page A-45.

Creating Unified Messaging Accounts in Cisco Unity Connection 8.5 and Later

BAT allows you to create Cisco Unity Connection unified messaging accounts from a CSV file. You can create more than one unified messaging account per user as long as the accounts do not enable the same feature. For example, one user cannot have two unified messaging accounts that both enable single inbox.

To create unified messaging accounts by using BAT, do the following tasks:

1. Create one or more unified messaging services, and create one unified messaging account for one user. The service is required to create a unified messaging account, and, in the next task, you will export the unified messaging account to a CSV file, which will serve as a template for creating the remaining unified messaging accounts for other users.

For more information, see the [“Task List for Configuring Cisco Unity Connection 8.5 and Later and Exchange for Unified Messaging”](#) section.

2. Export the unified messaging account that you created in Task 1. to a CSV file. For more information, see the [“Exporting Unified Messaging Accounts to a CSV File in Cisco Unity Connection 8.5 and Later”](#) section on page A-15.
3. Update the CSV file that you created in Task 2. with information on the other unified messaging accounts that you want to create. Note that you can create more than one unified messaging account for a user. For more information, see:
 - The [“Constructing the Input CSV Files in Cisco Unity Connection 8.x”](#) section on page A-15
 - Table A-6, “Required and Optional CSV Fields for Unified Messaging Accounts”
4. Create the unified messaging accounts by using BAT. See the following [“To Create Unified Messaging Accounts”](#) procedure.

To Create Unified Messaging Accounts

- Step 1** In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.
- Step 2** On the Bulk Administration Tool page, in the Select Operation section, select **Create**.
- Step 3** In the Select Object Type section, select **Unified Messaging Accounts**.
- Step 4** In the Select File section, in the CSV File field, enter the full path to the CSV input file.
- Step 5** In the Failed Objects Filename field, enter the name of the failed objects report file. For example, enter **errors.csv**.
- Step 6** Select **Submit**.

BAT begins creating unified messaging accounts and displays the summary page when the operation has completed.

If the operation results in any failures, you can immediately inspect the failed objects report file by selecting Download the Failed Objects File. For information about correcting errors, see the [“Correcting Errors by Using the Failed Objects File in Cisco Unity Connection 8.x”](#) section on page A-45.

Updating User Accounts in Cisco Unity Connection 8.x

**Note**

The information in this section is not applicable to updating user accounts in Cisco Unified Communications Manager Business Edition (CMBE). See the [“Creating Cisco Unity Connection 8.x User Accounts in a Cisco Unified Communications Manager Business Edition \(CMBE\) Configuration”](#) section on page 8-1.

BAT allows you to update Cisco Unity Connection user accounts (with or without voice mailboxes) with information from a CSV file. See the [“Constructing the Input CSV Files in Cisco Unity Connection 8.x”](#) section on page A-15 as you create the CSV file.

To Update User Accounts

Step 1 In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.

Step 2 On the Bulk Administration Tool page, in the Select Operation section, select **Update**.

Step 3 In the Select Object Type section, select the applicable option:

- Select **Users** to update users without voice mailboxes.
- Select **Users With Mailbox** to update accounts with mailboxes.

Step 4 In the Select File section, in the CSV File field, enter the full path to the CSV input file.

**Note**

If you are importing a CSV file that you created by exporting data from Connection, you may need to manually create the Password and PIN column headers, if applicable, and manually enter data, as these column headers are not included in an export.

Step 5 In the Failed Objects Filename field, enter the name of the failed objects report file. For example, enter **errors.csv**.

Step 6 Select **Submit**.

BAT begins updating user accounts and displays the summary page when the operation has completed.

If the operation results in any failures, you can immediately inspect the failed objects report file by selecting Download the Failed Objects File. For information about correcting errors, see the [“Correcting Errors by Using the Failed Objects File in Cisco Unity Connection 8.x”](#) section on page A-45.

Updating Contacts in Cisco Unity Connection 8.x

BAT allows you to update Cisco Unity Connection contacts with information from a CSV file. See the [“Constructing the Input CSV Files in Cisco Unity Connection 8.x” section on page A-15](#) as you create the CSV file.

To Update Contacts

-
- Step 1** In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.
 - Step 2** On the Bulk Administration Tool page, in the Select Operation section, select **Update**.
 - Step 3** Select **System Contacts**.
 - Step 4** In the Select File section, in the CSV File field, enter the full path to the CSV input file.



Note If you are importing a CSV file that you created by exporting data from Connection, you may need to manually create the ContactTemplateAlias column header, if applicable, and manually enter data, as this column header is not included in an export.

- Step 5** In the Failed Objects Filename field, enter the name of the failed objects report file. For example, enter **errors.csv**.
- Step 6** Select **Submit**.

BAT begins updating contacts and displays the summary page when the operation has completed.

If the operation results in any failures, you can immediately inspect the failed objects report file by selecting Download the Failed Objects File. For information about correcting errors, see the [“Correcting Errors by Using the Failed Objects File in Cisco Unity Connection 8.x” section on page A-45](#).

Updating System Distribution Lists in Cisco Unity Connection 8.x



Note The information in this section is not applicable to updating system distribution lists in Cisco Unified Communications Manager Business Edition (CMBE).

BAT allows you to update Cisco Unity Connection system distribution lists with information from a CSV file. See the [“Constructing the Input CSV Files in Cisco Unity Connection 8.x” section on page A-15](#) as you create the CSV file.

To Update System Distribution Lists

-
- Step 1** In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.
 - Step 2** On the Bulk Administration Tool page, in the Select Operation section, select **Update**.
 - Step 3** In the Select Object Type section, select **Distribution Lists**.
 - Step 4** In the Select File section, in the CSV File field, enter the full path of the applicable CSV file, or select **Browse** and locate the file.

Step 5 In the Failed Objects Filename field, enter the name of the failed objects report file. For example, enter **errors.csv**.

Step 6 Select **Submit**.

BAT begins updating distribution lists and displays the summary page when the operation has completed.

If the operation results in any failures, you can immediately inspect the failed objects report file by selecting **Download the Failed Objects File**. For information about correcting errors, see the [“Correcting Errors by Using the Failed Objects File in Cisco Unity Connection 8.x”](#) section on page A-45.

Updating Unified Messaging Accounts in Cisco Unity Connection 8.5 and Later

BAT allows you to update Cisco Unity Connection unified messaging accounts with information from a CSV file. You can change any attribute of a unified messaging account except the following:

- subscriberAlias
- serviceDisplayName
- OptionalServiceAccountID

If you want to change either the subscriber (subscriberAlias) or the unified messaging service (serviceDisplayName) for a group of unified messaging accounts, you must delete existing unified messaging accounts and then create new accounts that have the new values. You cannot change the value of OptionalServiceAccountID, which is automatically generated when you create unified messaging accounts.



Caution

If you delete and recreate unified messaging accounts for existing users, Connection resynchronizes the Connection and Exchange mailboxes, which can slow Connection performance. We recommend that you perform this operation outside of normal business hours.

See the [“Constructing the Input CSV Files in Cisco Unity Connection 8.x”](#) section on page A-15 as you create the CSV file.

To Update Unified Messaging Accounts

Step 1 In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.

Step 2 On the Bulk Administration Tool page, in the Select Operation section, select **Update**.

Step 3 Select **Unified Messaging Accounts**.

Step 4 In the Select File section, in the CSV File field, enter the full path to the CSV input file.

Step 5 In the Failed Objects Filename field, enter the name of the failed objects report file. For example, enter **errors.csv**.

Step 6 Select **Submit**.

BAT begins updating unified messaging accounts and displays the summary page when the operation has completed.

If the operation results in any failures, you can immediately inspect the failed objects report file by selecting Download the Failed Objects File. For information about correcting errors, see the [“Correcting Errors by Using the Failed Objects File in Cisco Unity Connection 8.x”](#) section on page A-45.

Deleting User Accounts in Cisco Unity Connection 8.x

**Note**

The information in this section is not applicable to deleting user accounts in Cisco Unified Communications Manager Business Edition (CMBE). See the [“Creating Cisco Unity Connection 8.x User Accounts in a Cisco Unified Communications Manager Business Edition \(CMBE\) Configuration”](#) section on page 8-1.

BAT allows you to delete Cisco Unity Connection user accounts (with or without voice mailboxes) that are listed in a CSV file. See the [“Constructing the Input CSV Files in Cisco Unity Connection 8.x”](#) section on page A-15 as you create the CSV file.

To Delete User Accounts

- Step 1** In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.
- Step 2** On the Bulk Administration Tool page, in the Select Operation section, select **Delete**.
- Step 3** In the Select Object Type section, select the applicable option:
 - Select **Users** to delete users without voice mailboxes.
 - Select **Users With Mailbox** to delete accounts with mailboxes.
- Step 4** In the Select File section, in the CSV File field, enter the full path to the CSV input file.
- Step 5** In the Failed Objects Filename field, enter the name of the failed objects report file. For example, enter **errors.csv**.
- Step 6** Select **Submit**.

BAT begins deleting user accounts and displays the summary page when the operation has completed.

If the operation results in any failures, you can immediately inspect the failed objects report file by selecting Download the Failed Objects File. For information about correcting errors, see the [“Correcting Errors by Using the Failed Objects File in Cisco Unity Connection 8.x”](#) section on page A-45.

Deleting Contacts in Cisco Unity Connection 8.x

BAT allows you to delete Cisco Unity Connection contacts listed in a CSV file. See the [“Constructing the Input CSV Files in Cisco Unity Connection 8.x”](#) section on page A-15 as you create the CSV file.

To Delete Contacts

- Step 1** In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.

- Step 2** On the Bulk Administration Tool page, in the Select Operation section, select **Delete**.
- Step 3** In the Select Object Type section, select **System Contacts**.
- Step 4** In the Select File section, in the CSV File field, enter the full path to the CSV input file.
- Step 5** In the Failed Objects Filename field, enter the name of the failed objects report file. For example, enter **errors.csv**.
- Step 6** Select **Submit**.
- BAT begins deleting contacts and displays the summary page when the operation has completed.
- If the operation results in any failures, you can immediately inspect the failed objects report file by selecting **Download the Failed Objects File**. For information about correcting errors, see the [“Correcting Errors by Using the Failed Objects File in Cisco Unity Connection 8.x”](#) section on page A-45.
-

Deleting System Distribution Lists in Cisco Unity Connection 8.x



Note

The information in this section is not applicable to deleting system distribution lists in Cisco Unified Communications Manager Business Edition (CMBE).

BAT allows you to delete Cisco Unity Connection system distribution lists that are listed in a CSV file. See the [“Constructing the Input CSV Files in Cisco Unity Connection 8.x”](#) section on page A-15 as you create the CSV file.

To Delete System Distribution Lists

- Step 1** In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.
- Step 2** On the Bulk Administration Tool page, in the Select Operation section, select **Delete**.
- Step 3** In the Select Object Type section, select **Distribution Lists**.
- Step 4** In the Select File section, in the CSV File field, enter the full path of the applicable CSV file, or select **Browse** and locate the file.
- Step 5** In the Failed Objects Filename field, enter the name of the failed objects report file. For example, enter **errors.csv**.
- Step 6** Select **Submit**.
- BAT begins deleting distribution lists and displays the summary page when the operation has completed.
- If the operation results in any failures, you can immediately inspect the failed objects report file by selecting **Download the Failed Objects File**. For information about correcting errors, see the [“Correcting Errors by Using the Failed Objects File in Cisco Unity Connection 8.x”](#) section on page A-45.
-

Deleting System Distribution List Members in Cisco Unity Connection 8.x

**Note**

The information in this section is not applicable to deleting system distribution list members in Cisco Unified Communications Manager Business Edition (CMBE).

BAT allows you to delete Cisco Unity Connection system distribution list members that are listed in a CSV file. See the [“Constructing the Input CSV Files in Cisco Unity Connection 8.x”](#) section on [page A-15](#) as you create the CSV file.

To Delete System Distribution List Members

- Step 1** In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.
- Step 2** On the Bulk Administration Tool page, in the Select Operation section, select **Delete**.
- Step 3** In the Select Object Type section, select **Distribution List Members**.
- Step 4** In the Select File section, in the CSV File field, enter the full path of the applicable CSV file, or select **Browse** and locate the file.
- Step 5** In the Failed Objects Filename field, enter the name of the failed objects report file. For example, enter **errors.csv**.
- Step 6** Select **Submit**.

BAT begins deleting distribution list members and displays the summary page when the operation has completed.

If the operation results in any failures, you can immediately inspect the failed objects report file by selecting **Download the Failed Objects File**. For information about correcting errors, see the [“Correcting Errors by Using the Failed Objects File in Cisco Unity Connection 8.x”](#) section on [page A-45](#).

Deleting Unified Messaging Accounts in Cisco Unity Connection 8.5 and Later

BAT allows you to delete Cisco Unity Connection unified messaging accounts listed in a CSV file. See the [“Constructing the Input CSV Files in Cisco Unity Connection 8.x”](#) section on [page A-15](#) as you create the CSV file.

**Note**

Each unified messaging account is associated with a user, but a unified messaging account is a separate object in the Connection database. If you delete a unified messaging account, the associated user account is not deleted.

To Delete Unified Messaging Accounts

-
- Step 1** In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.
- Step 2** On the Bulk Administration Tool page, in the Select Operation section, select **Delete**.
- Step 3** In the Select Object Type section, select **Unified Messaging Accounts**.
- Step 4** In the Select File section, in the CSV File field, enter the full path to the CSV input file.
- Step 5** In the Failed Objects Filename field, enter the name of the failed objects report file. For example, enter **errors.csv**.
- Step 6** Select **Submit**.
- BAT begins deleting unified messaging accounts and displays the summary page when the operation has completed.
- If the operation results in any failures, you can immediately inspect the failed objects report file by selecting Download the Failed Objects File. For information about correcting errors, see the [“Correcting Errors by Using the Failed Objects File in Cisco Unity Connection 8.x”](#) section on page A-45.
-

Exporting Users to a CSV File in Cisco Unity Connection 8.x

BAT allows you to export information about all users (with or without voice mailboxes) from Cisco Unity Connection to a CSV file.

Note that the following column headers are not included in an export: TemplateAlias, Password, and PIN. If you plan to include those column headers in the CSV file, you will need to add them manually after export.

To Export Users to a CSV File

-
- Step 1** In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.
- Step 2** On the Bulk Administration Tool page, in the Select Operation section, select **Export**.
- Step 3** In the Select Object Type section, select the applicable option:
- Select **Users** to update users without voice mailboxes.
 - Select **Users With Mailbox** to update accounts with mailboxes.
- Step 4** In the Select File section, in the CSV File field, enter the full path to the applicable file.
- Step 5** Select **Submit**.
- The Summary page displays the results when the operation has completed. To view the export CSV file, select **View Export Objects File**.
-

Exporting Contacts to a CSV File in Cisco Unity Connection 8.x

BAT allows you to export information about contacts from Cisco Unity Connection to a CSV file.

Note that the `ContactTemplateAlias` column header is not included in an export. If you plan to include that column header in the CSV file, you will need to add it manually after export.

To Export Contacts to a CSV File

-
- Step 1** In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.
 - Step 2** On the Bulk Administration Tool page, in the Select Operation section, select **Export**.
 - Step 3** In the Select Object Type section, select **System Contacts**.
 - Step 4** In the Select File section, in the CSV File field, enter the full path to the applicable file.
 - Step 5** Select **Submit**.

The Summary page displays the results when the operation has completed. To view the export CSV file, select **View Export Objects File**.

Exporting Users from an LDAP Directory to a CSV File in Cisco Unity Connection 8.x

BAT allows you to export LDAP user information to a CSV file from a hidden Cisco Unified CM database on the Connection server. Before you can use this option, you must configure Cisco Unity Connection to integrate with an LDAP directory by using the procedures in the [“Integrating Cisco Unity Connection 8.x with an LDAP Directory”](#) section.

To Export Users from an LDAP Directory to a CSV File

-
- Step 1** In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.
 - Step 2** On the Bulk Administration Tool page, in the Select Operation section, select **Export**.
 - Step 3** In the Select Object Type section, select **Users from LDAP Directory**.
 - Step 4** In the Select File section, in the CSV File field, enter the full path to the applicable file.
 - Step 5** Select **Submit**.

The Summary page displays the results when the operation has completed. To view the export CSV file, select **View Export Objects File**.

Exporting System Distribution Lists to a CSV File in Cisco Unity Connection 8.x

BAT allows you to export information about system distribution lists from Cisco Unity Connection to a CSV file.

To Export System Distribution Lists to a CSV File

-
- Step 1** In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.
 - Step 2** On the Bulk Administration Tool page, in the Select Operation section, select **Export**.
 - Step 3** In the Select Object Type section, select **Distribution Lists**.
 - Step 4** In the Select File section, in the CSV File field, enter the full path to the applicable file.
 - Step 5** Select **Submit**.

The Summary page displays the results when the operation has completed. To view the export CSV file, select **View Export Objects File**.

Exporting System Distribution List Members to a CSV File in Cisco Unity Connection 8.x

BAT allows you to export information about system distribution list members from Cisco Unity Connection to a CSV file.

To Export System Distribution List Members to a CSV File

-
- Step 1** In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.
 - Step 2** On the Bulk Administration Tool page, in the Select Operation section, select **Export**.
 - Step 3** In the Select Object Type section, select **Distribution List Members**.
 - Step 4** In the Select File section, in the CSV File field, enter the full path to the applicable file.
 - Step 5** Select **Submit**.

The Summary page displays the results when the operation has completed. A zip file is created that contains files representing each of the distribution list members. To view the members, unzip the file.

Exporting Unified Messaging Accounts to a CSV File in Cisco Unity Connection 8.5 and Later

BAT allows you to export information about unified messaging accounts from Cisco Unity Connection to a CSV file.

To Export Unified Messaging Accounts to a CSV File

-
- Step 1** In Cisco Unity Connection Administration, expand **Tools**, then select **Bulk Administration Tool**.
 - Step 2** On the Bulk Administration Tool page, in the Select Operation section, select **Export**.
 - Step 3** In the Select Object Type section, select **Unified Messaging Accounts**.
 - Step 4** In the Select File section, in the CSV File field, enter the full path to the applicable file.
 - Step 5** Select **Submit**.

The Summary page displays the results when the operation has completed. To view the export CSV file, select **View Export Objects File**.

Constructing the Input CSV Files in Cisco Unity Connection 8.x

BAT supports only UTF-8 and UTF-16 character set encoding for the text in the CSV file.

To quickly construct an input CSV file, you can use BAT to export the applicable type of user, contact, system distribution list, system distribution list members, or unified messaging accounts, and use the resulting output CSV file as a template.

The following example shows a CSV file for creating voicemail users. To construct the file, voicemail users were exported to a CSV file. Then, unwanted columns and data were removed from the file. Finally, the TemplateAlias column and the applicable data were added. (Note that the data for DisplayName—an optional field—is missing for several users.)

Example CSV Input File for Creating Voicemail Users

```
Alias,DisplayName,FirstName,LastName,TemplateAlias,Extension,ListInDirectory
iwinkler,"Winkler, Ian",Ian,Winkler,VoiceMailUserTemplate,5321,1
jsmith,,John,Smith,VoiceMailUserTemplate,5126,1
cjones,"Jones, Cris",Cris,Jones,VoiceMailUserTemplate,5249,1
dalbert,,Dan,Albert,VoiceMailUserTemplate,5299,1
jlee,"Lee, Jane",Jane,Lee,VoiceMailUserTemplate,5324,1
jthompson,"Thompson, Jim",Jim,Thompson,VoiceMailUserTemplate,5029,1
swong,"Wong, Sara",Sara,Wong,VoiceMailUserTemplate,5260,1
rhunter,"Hunter, Russ",Russ,Hunter,VoiceMailUserTemplate,5229,1
cashmore,,Carol,Ashmore,VoiceMailUserTemplate,5403,1
lcarson,"Carson, Lauren",Lauren,Carson,VoiceMailUserTemplate,5999,1
```

Whether you modify an output CSV file or create a CSV file from scratch, use the following guidelines, along with the tables in the [“Required and Optional CSV Fields” section on page A-16](#) to construct a valid input CSV file for use with the BAT:

- The first row in your CSV file must contain column headings that identify the type of data in each column; information in the subsequent rows must contain the data that you want to import.

- Ensure that commas separate the data in each row in your CSV file, including the column headings in the first row. Do not use a tab, spaces, or a semicolon to separate values in the file.
- Although the data must be arranged in the same order as the column heading, the order in which you arrange the columns is unimportant.
- If the CSV file includes a column that you want BAT to ignore, use the column heading “Junk.”
- If any data includes a space, quotes, or commas, contain it within quotes.

We recommend that your data not include double-quotes because it can cause problems with interactions with external servers. If the data does include double-quotes, place an additional double-quote next to each double-quote. For example, if the data is My “Spare Phone”, the entry must be My ““Spare Phone””.

- Column headings are not case sensitive, but they must be spelled as indicated in the tables in the [“Required and Optional CSV Fields” section on page A-16](#). Columns that are designated not applicable (N/A) for an operation are ignored.
- *(Applicable only to Cisco Unity Connection configurations)* For creating user accounts, most optional fields that are listed in the CSV field tables correspond to settings defined in a user template. For example, for voicemail users, the default template includes class of service (COS), call transfer, and message notification settings. When data for a particular user setting is not included in the CSV file, BAT uses settings in the user template that you specify in the required field TemplateAlias. For this reason, you should review the settings in the user template that you use to create the accounts before adding any of the optional column headers to your CSV file. If a value for an optional field is not included in the CSV file, and if the template does not specify a default value, then the value for the field is not set.


Caution

If you specify an administrator template for TemplateAlias, the users will not have mailboxes

- To explicitly set the value of a field to empty (or to null, if allowed), use the expression %null% for the value in the CSV file.
- We recommend that you do not include more than 5,000 records in an input CSV file.

Required and Optional CSV Fields

The tables in this section list the required and optional fields, as applicable, to include in input CSV files. The fields are listed in alphabetical order, except for the required fields, which are listed first.

Use the applicable table, depending on the type of object:

- Users Without Voice Mailboxes—[Table A-1](#)
- Users With Voice Mailboxes—[Table A-2](#)
- Contacts—[Table A-3](#)
- Distribution Lists—[Table A-4](#)
- Distribution List Members—[Table A-5](#)
- Unified Messaging Accounts—[Table A-6](#)

Table A-1 Required and Optional CSV Fields for Users Without Voice Mailboxes


Column Heading	Creating	Updating	Deleting	Description
Alias	Required	Required	Required	<p>The unique text name for the user account.</p> <p>Any combination of ASCII or Unicode alphanumeric characters, periods, commas, spaces, and the special characters ` , ~ , ! , @ , # , \$, % , ^ , & , - , _ , ' , up to a maximum of 64 characters.</p>
TemplateAlias	Required	N/A	N/A	<p>The unique text name for the user template to apply to the account during creation.</p> <div>  <p>Caution If you specify an administrator template for TemplateAlias, the users will not have mailboxes.</p> </div>
Password	Optional	Optional	N/A	<p>The unique characters that the user enters to access Cisco Unity Connection web applications.</p> <p>Any combination of alphanumeric characters, and the following special characters: ~ ! @ # \$ % ^ & * () - _ + = { } [] : " ' ; < > ? \ . ,</p> <p>To help protect Connection from unauthorized access and toll fraud, enter a long—eight or more characters—and non-trivial password.</p>
Address	Optional	Optional	N/A	<p>The physical address such as a house number and street name where the user is located, or with which the user is associated.</p> <p>Any combination of ASCII or Unicode characters, up to a maximum of 128 characters.</p>
BillingId	Optional	Optional	N/A	<p>Organization-specific information about the user, such as accounting information, department names, or project codes. The information can be included in user reports.</p> <p>Any combination of ASCII or Unicode characters, up to a maximum of 32 digits.</p>
Building	Optional	Optional	N/A	<p>The name of the building where the user is based.</p> <p>Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.</p>
City	Optional	Optional	N/A	<p>The name of a locality, such as a city, county or other geographic region where the user is located, or with which the user is associated.</p> <p>Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.</p>
Country	Optional	Optional	N/A	<p>The 2-letter ISO 3166-1 country code where the user is located, or with which the user is associated.</p> <p>Two ASCII lower or upper case alpha characters.</p>

Table A-1 Required and Optional CSV Fields for Users Without Voice Mailboxes (continued)

Column Heading	Creating	Updating	Deleting	Description
Department	Optional	Optional	N/A	The name or number for the department or subdivision of an organization to which the user belongs. Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.
DisplayName	Optional	Optional	N/A	The user name that appears on the administration and user interfaces. If Displayname is empty and both Firstname and Lastname are present, then Displayname would be combination of "Firstname Lastname", else Displayname would be Alias. Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.
EmailAddress	Optional	Optional	N/A	The email address of the user. This corresponds to the Corporate Email Address field in Cisco Unity Connection Administration. Note that the field is only for directory information purposes. Cisco Unity Connection does not use the address to deliver incoming messages. Any combination of ASCII alphanumeric characters, and the special characters hyphen, underscore, period and at sign ("@"), up to a maximum of 320 characters.
EmployeeId	Optional	Optional	N/A	The numeric or alphanumeric identifier assigned to a user, typically based on order of hire or association with an organization. Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.
EnhancedSecurityAlias	Optional	Optional	N/A	The unique text name used to identify and authenticate the user with an RSA SecurID security system. Any combination of ASCII or Unicode characters, up to a maximum of 50 characters.
FirstName	Optional	Optional	N/A	The user first name. Any combination of ANSI or Unicode alphanumeric characters, periods, commas, spaces, and the special characters ` , ~ , ! , @ , # , \$, % , ^ , & , - , _ , ' , up to a maximum of 64 characters.
Initials	Optional	Optional	N/A	The initials of part or all of the user name. Any combination of ANSI or Unicode alphanumeric characters, periods, commas, spaces, and the special characters ` , ~ , ! , @ , # , \$, % , ^ , & , - , _ , ' , up to a maximum of 6 characters.

Table A-1 Required and Optional CSV Fields for Users Without Voice Mailboxes (continued)

Column Heading	Creating	Updating	Deleting	Description
Language	Optional	Optional	N/A	<p>The preferred language of the user.</p> <p>Use the Windows language code, such as 1033 for U.S. English. For a list of supported languages and the corresponding language codes, see the “Numeric and Alphabetic Codes for Supported Languages in Cisco Unity Connection” section in the <i>System Requirements for Cisco Unity Connection 8.x</i> at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/requirements/8xcucsysreqs.html.</p>
LastName	Optional	Optional	N/A	<p>The user last name.</p> <p>Any combination of ANSI or Unicode alphanumeric characters, periods, commas, spaces, and the special characters ` , ~ , ! , @ , # , \$, % , ^ , & , - , _ , ' , up to a maximum of 64 characters.</p>
Manager	Optional	Optional	N/A	<p>The name of the person who is the manager or supervisor of the user.</p> <p>Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.</p>
PostalCode	Optional	Optional	N/A	<p>For users located in the United States, the zip code where the user is located, or with which the user is associated. For users located in Canada, Mexico, and other countries, the postal code where the user is located, or with which the user is associated.</p> <p>Any combination of ASCII or Unicode characters, up to a maximum of 40 characters.</p>
State	Optional	Optional	N/A	<p>The full name of the state or province where the user is located, or with which the user is associated.</p> <p>Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.</p>
TimeZone	Optional	Optional	N/A	The time zone with which the user account is associated.
Title	Optional	Optional	N/A	<p>The position or function of the user within the organization, for example “Vice President.”</p> <p>Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.</p>
LdapCcmUserID	Optional	Optional	N/A	<p>The value of the LDAP field that you mapped to the Connection Alias field when you configured Cisco Unity Connection to integrate with an LDAP directory by using the procedures in the “Integrating Cisco Unity Connection 8.x with an LDAP Directory” section.</p> <p>This field is used when you create Connection users by importing LDAP user data and when you integrate existing Connection users with LDAP users. For more information, see the applicable section:</p> <ul style="list-style-type: none"> • Creating Cisco Unity Connection 8.x Users from LDAP Data by Using the Bulk Administration Tool, page 12-3

Table A-2 Required and Optional CSV Fields for Users With Voice Mailboxes

Column Heading	Creating	Updating	Deleting	Description
Alias	Required	Required	Required	<p>The unique text name for the user account.</p> <p>Any combination of ASCII or Unicode alphanumeric characters, periods, commas, spaces, and the special characters ` , ~ , ! , @ , # , \$, % , ^ , & , - , _ , ' , up to a maximum of 64 characters.</p> <p>We recommend that you use only printable ASCII characters in the Alias field, because some messaging features do not support non-printing ASCII characters or Unicode. (The non-printing ASCII control characters are those below code 0x20.) For example, IMAP only supports user names that contain printable ASCII characters, so users with Connection aliases that contain non-printing characters or Unicode are unable to access their Connection messages via IMAP clients. In addition, the Cisco Object Backup and Restore Application Suite (COBRAS) will be unable to back up messages for such users, because COBRAS uses IMAP to perform the backup.</p>
Extension	Required	Optional	N/A	<p>The number that callers dial to reach the user.</p> <p>The value must be unique among users in the partition.</p> <p>Any combination of ASCII alphanumeric characters, from 3 to 40 characters long.</p>
TemplateAlias	Required	N/A	N/A	The unique text name for the user template to apply to the account during creation.
Password	Optional	Optional	N/A	<p>The unique characters that the user enters to access Cisco Unity Connection web applications.</p> <p>Any combination of alphanumeric characters, and the following special characters: ~ ! @ # \$ % ^ & * () _ + = { } [] : " ' ; < > ? \ . ,</p> <p>To help protect Connection from unauthorized access and toll fraud, enter a long—eight or more characters—and non-trivial password.</p>
PIN	Optional	Optional	N/A	<p>The unique digits that the user enters to access voice messages by phone.</p> <p>Any combination of digits 0 through 9.</p> <p>To help protect Cisco Unity Connection from unauthorized access and toll fraud, enter a long—six or more digits—and non-trivial PIN.</p>
Address	Optional	Optional	N/A	<p>The physical address, such as a house number and street name where the user is located, or with which the user is associated.</p> <p>Any combination of ASCII or Unicode characters, up to a maximum of 128 characters.</p>

Table A-2 Required and Optional CSV Fields for Users With Voice Mailboxes (continued)

Column Heading	Creating	Updating	Deleting	Description
AltFirstNames	Optional	Optional	N/A	<p>An alternate version of the first name. Connection considers alternate names when users and callers use voice recognition to place a call or address voice messages.</p> <p>To create/update more than one alternate first name per user, separate them by semicolons (;). If an alternate name needs to contain a semicolon, precede the semicolon with another semicolon to indicate to Connection that the name contains a semicolon.</p> <p>Use this field in conjunction with the AltLastNames field to add nicknames or maiden names for users. You can also use alternate names to add phonetic spellings of hard-to-pronounce names.</p> <p>Alternate first names and alternate last names are stored as a pair in the database. When submitting multiple alternate names, make sure that you have the same number of alternate first names and alternate last names.</p> <p>For example, if you have a user named Elizabeth Brown, who is sometimes known as “Liz” and sometimes known by her maiden name of “Smith,” you would enter the following AltFirstNames and AltLastNames to ensure that all four combinations are submitted to the database:</p> <ul style="list-style-type: none"> Elizabeth; Liz; Elizabeth; Liz Brown; Brown; Smith; Smith

Table A-2 Required and Optional CSV Fields for Users With Voice Mailboxes (continued)

Column Heading	Creating	Updating	Deleting	Description
AltLastNames	Optional	Optional	N/A	<p>An alternate version of the last name. Connection considers alternate names when users and callers use voice recognition to place a call or address voice messages.</p> <p>To create/update more than one alternate last name per user, separate them by semicolons (;). If an alternate name needs to contain a semicolon, precede the semicolon with another semicolon to indicate to Connection that the name contains a semicolon.</p> <p>Use this field in conjunction with the AltFirstNames field to add nicknames or maiden names for users. You can also use alternate names to add phonetic spellings of hard-to-pronounce names.</p> <p>Alternate first names and alternate last names are stored as a pair in the database. When submitting multiple alternate names, make sure that you have the same number of alternate first names and alternate last names.</p> <p>For example, if you have a user named Elizabeth Brown, who is sometimes known as “Liz” and sometimes known by her maiden name of “Smith,” you would enter the following AltFirstNames and AltLastNames to ensure that all four combinations are submitted to the database:</p> <ul style="list-style-type: none"> Elizabeth; Liz; Elizabeth; Liz Brown; Brown; Smith; Smith
BillingId	Optional	Optional	N/A	<p>Organization-specific information about the user, such as accounting information, department names, or project codes. The information can be included in user reports.</p> <p>Any combination of digits from 0 through 9, up to a maximum of 32 digits.</p>
Building	Optional	Optional	N/A	<p>The name of the building where the user is based.</p> <p>Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.</p>
City	Optional	Optional	N/A	<p>The name of a locality, such as a city, county or other geographic region where the user is located, or with which the user is associated.</p> <p>Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.</p>
Country	Optional	Optional	N/A	<p>The 2-letter ISO 3166-1 country code where the user is located, or with which the user is associated.</p> <p>Two ASCII lower or upper case alpha characters.</p>

Table A-2 Required and Optional CSV Fields for Users With Voice Mailboxes (continued)

Column Heading	Creating	Updating	Deleting	Description
Department	Optional	Optional	N/A	The name or number for the department or subdivision of an organization to which the user belongs. Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.
DisplayName	Optional	Optional	N/A	The user name that appears on the administration and user interfaces. If Displayname is empty and both Firstname and Lastname are present, then Displayname would be combination of "Firstname Lastname", else Displayname would be Alias. Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.
EmailAddress	Optional	Optional	N/A	The primary email address of the user. When you are not using unified messaging features, the field is used only for directory information purposes. Cisco Unity Connection does not use the address to deliver incoming messages. When you are using unified messaging features to access Exchange, the field may be used to specify the Exchange mailbox that you want Connection to access for a Connection user. For more information, see the emailAddressUseCorp row in Table A-6 . Any combination of ASCII alphanumeric characters, and hyphens, underscores, periods and at signs (“@”), up to a maximum of 320 characters.
MailName	Optional	Optional	N/A	Name used to construct part of SMTP address before the @ sign. A name is needed for unicode aliases that cannot be converted into a valid SMTP addresses.
EmployeeId	Optional	Optional	N/A	The numeric or alphanumeric identifier assigned to a user, typically based on order of hire or association with an organization. Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.
EnhancedSecurityAlias	Optional	Optional	N/A	The unique text name used to identify and authenticate the user with an RSA SecurID security system. Any combination of ASCII or Unicode characters, up to a maximum of 50 characters.
FirstName	Optional	Optional	N/A	The user first name. Any combination of ANSI or Unicode alphanumeric characters, periods, commas, spaces, and the special characters ` , ~ , ! , @ , # , \$, % , ^ , & , - , _ , ' , up to a maximum of 64 characters.

Table A-2 Required and Optional CSV Fields for Users With Voice Mailboxes (continued)

Column Heading	Creating	Updating	Deleting	Description
Initials	Optional	Optional	N/A	The initials of part or all of the user name. Any combination of ANSI or Unicode alphanumeric characters, periods, commas, spaces, and the special characters ` , ~ , ! , @ , # , \$, % , ^ , & , - , _ , ' , up to a maximum of 6 characters.
Language	Optional	Optional	N/A	The preferred language of the user. Use the Windows language code, such as 1033 for U.S. English. For a list of supported languages and the corresponding language codes, see the “Numeric and Alphabetic Codes for Supported Languages in Cisco Unity Connection” section in the <i>System Requirements for Cisco Unity Connection 8.x</i> at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/requirements/8xcucsystreqs.html .
LastName	Optional	Optional	N/A	The user last name. Any combination of ANSI or Unicode alphanumeric characters, periods, commas, spaces, and the special characters ` , ~ , ! , @ , # , \$, % , ^ , & , - , _ , ' , up to a maximum of 64 characters.
Manager	Optional	Optional	N/A	The name of the manager or supervisor of the user. Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.
PostalCode	Optional	Optional	N/A	For users located in the United States, the zip code where the user is located, or with which a user is associated. For users located in Canada, Mexico, and other countries, the postal code where the user is located, or with which a user is associated. Any combination of ASCII or Unicode characters, up to a maximum of 40 characters.
State	Optional	Optional	N/A	The full name of the state or province where the user is located, or with which a user is associated. Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.
TimeZone	Optional	Optional	N/A	The time zone with which the user account is associated.
Title	Optional	Optional	N/A	The position or function of the user within the organization, for example “Vice President.” Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.
COSDisplayName	Optional	Optional	N/A	The unique text name that is displayed on the user interfaces for the class of service (COS) with which the user account is associated. Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.

Table A-2 Required and Optional CSV Fields for Users With Voice Mailboxes (continued)

Column Heading	Creating	Updating	Deleting	Description
ClientMatterCode	Optional	Optional	N/A	<p>The required Client Matter Code (CMC) to transmit to Cisco Unified Communications Manager (CM), if applicable, when the user makes an outbound call.</p> <p>CMCs are typically used to enable the system to track calls for account or billing purposes.</p> <p>The value is used only if the system is using Cisco Unified CM and if the version of Cisco Unified CM is 4.1 and later.</p> <p>Whether the CMC is transmitted depends on the setting for outbound calls. The user CMC is used only if the outbound call does not have its own CMC.</p> <p>The code length can be from 1 through 40 characters.</p>
TransferType	Optional	Optional	N/A	<p>(Applicable only to the Alternate transfer rule.) Determines the way in which Cisco Unity Connection transfers calls from the automated attendant or a directory handler to the user phone for the Alternate transfer rule:</p> <ul style="list-style-type: none"> 0—supervised 1—unsupervised (also called a “Release to Switch” transfer) <p>For the Standard or Closed transfer rules, see “StandardTransferType” or “ClosedTransferType”.</p>
TransferRings	Optional	Optional	N/A	<p>(Applicable only to the Alternate transfer rule.) Determines the number of times the user extension rings before Cisco Unity Connection considers the call unanswered (“ring-no-answer”) and plays the applicable greeting. This setting is applicable only when the TransferType is configured for a supervised transfer.</p> <p>An integer value from 2 through 100.</p> <p>For the Standard or Closed transfer rules, see “StandardTransferRings” or “ClosedTransferRings”.</p>
TransferExtension	Optional	Optional	N/A	<p>(Applicable only to the Alternate transfer rule.) The phone number that Cisco Unity Connection transfers calls to if TransferAction is set to 1.</p> <p>For the Standard or Closed transfer rules, see “StandardTransferExtension” or “ClosedTransferExtension”.</p>

Table A-2 Required and Optional CSV Fields for Users With Voice Mailboxes (continued)

Column Heading	Creating	Updating	Deleting	Description
TransferAction	Optional	Optional	N/A	<p>(Applicable only to the Alternate transfer rule.) Determines whether Cisco Unity Connection transfers the incoming calls for the user to the user greeting or to the extension specified in TransferExtension:</p> <ul style="list-style-type: none"> 0—Transfer to the greeting. 1—Transfer to TransferExtension. <p>For the Standard or Closed transfer rules, see “StandardTransferAction” or “ClosedTransferAction”.</p>
RnaAction	Optional	Optional	N/A	<p>(Applicable only to the Alternate transfer rule.) This setting is applicable only when the TransferType is configured for a supervised transfer. Determines whether Cisco Unity Connection transfers the call to the applicable greeting or releases the call to the phone system when a call is unanswered (“ring-no-answer”):</p> <ul style="list-style-type: none"> 0—Release the call to the phone system. 1—After the number of rings specified in the TransferRings field, transfer the call to the appropriate greeting. <p>For the Standard or Closed transfer rules, see “StandardRnaAction” or “ClosedRnaAction”.</p>
StandardTransferType	Optional	Optional	N/A	<p>(Applicable only to the Standard transfer rule.) Determines the way in which Cisco Unity Connection transfers calls from the automated attendant or a directory handler to the user phone for the standard (default) transfer rule:</p> <ul style="list-style-type: none"> 0—supervised 1—unsupervised (also called a “Release to Switch” transfer)
StandardTransferRings	Optional	Optional	N/A	<p>(Applicable only to the Standard transfer rule.) Determines the number of times the user extension rings before Cisco Unity Connection considers the call unanswered (“ring-no-answer”) and plays the applicable greeting. This setting is applicable only when the StandardTransferType is configured for a supervised transfer.</p> <p>An integer value from 2 through 100.</p>
StandardTransferExtension	Optional	Optional	N/A	<p>(Applicable only to the Standard transfer rule.) The phone number that Cisco Unity Connection transfers calls to if StandardTransferAction is set to 1.</p>

Table A-2 Required and Optional CSV Fields for Users With Voice Mailboxes (continued)

Column Heading	Creating	Updating	Deleting	Description
StandardTransferAction	Optional	Optional	N/A	(Applicable only to the Standard transfer rule.) Determines whether Cisco Unity Connection transfers the incoming calls for the user to the user greeting or to the extension specified in StandardTransferExtension: <ul style="list-style-type: none"> 0—Transfer to the greeting. 1—Transfer to StandardTransferExtension.
StandardRnaAction	Optional	Optional	N/A	(Applicable only to the Standard transfer rule.) This setting is applicable only when the StandardTransferType is configured for a supervised transfer. Determines whether Cisco Unity Connection transfers the call to the applicable greeting or releases the call to the phone system when a call is unanswered (“ring-no-answer”): <ul style="list-style-type: none"> 0—Release the call to the phone system. 1—After the number of rings specified in the StandardTransferRings field, transfer the call to the appropriate greeting.
ClosedTransferType	Optional	Optional	N/A	(Applicable only to the Closed transfer rule.) Determines the way in which Cisco Unity Connection transfers calls from the automated attendant or a directory handler to the user phone for the Closed transfer rule: <ul style="list-style-type: none"> 0—supervised 1—unsupervised (also called a “Release to Switch” transfer)
ClosedTransferRings	Optional	Optional	N/A	(Applicable only to the Closed transfer rule.) Determines the number of times the user extension rings before Cisco Unity Connection considers the call unanswered (“ring-no-answer”) and plays the applicable greeting. This setting is applicable only when the ClosedTransferType is configured for a supervised transfer. An integer value from 2 through 100.
ClosedTransferExtension	Optional	Optional	N/A	(Applicable only to the Closed transfer rule.) The phone number that Cisco Unity Connection transfers calls to if ClosedTransferAction is set to 1.
ClosedTransferAction	Optional	Optional	N/A	(Applicable only to the Closed transfer rule.) Determines whether Cisco Unity Connection transfers the incoming calls for the user to the user greeting or to the extension specified in ClosedTransferExtension: <ul style="list-style-type: none"> 0—Transfer to the greeting. 1—Transfer to ClosedTransferExtension.

Table A-2 Required and Optional CSV Fields for Users With Voice Mailboxes (continued)

Column Heading	Creating	Updating	Deleting	Description
ClosedRnaAction	Optional	Optional	N/A	<p>(Applicable only to the Closed transfer rule.) This setting is applicable only when the StandardTransferType is configured for a supervised transfer. Determines whether Cisco Unity Connection transfers the call to the applicable greeting or releases the call to the phone system when a call is unanswered (“ring-no-answer”):</p> <ul style="list-style-type: none"> 0—Release the call to the phone system. 1—After the number of rings specified in the ClosedTransferRings field, transfer the call to the appropriate greeting.
MWIExtension	Optional	Optional	N/A	<p>The phone number (extension) of the default message waiting indicator (MWI) to light when callers leave messages for the user.</p> <p>If no value is provided, Cisco Unity Connection uses the number of the primary extension.</p>
MWIMediaSwitchDisplay Name	Optional	Optional	N/A	<p>The text name displayed on the system administration interface of the phone system used to turn message waiting indicators on and off for the phone number specified in the MWIExtension column.</p> <p>If no value is provided, Cisco Unity Connection uses the phone system specified in the MediaSwitchDisplayName column.</p>
MaxMsgLen	Optional	Optional	N/A	<p>The maximum duration (in seconds) for recording a message from an outside (unidentified) caller.</p> <p>The length specified can be from 1 through 1,200 seconds.</p>
PlayPostGreetingRecording	Optional	Optional	N/A	<p>Indicates whether Cisco Unity Connection plays a recording to callers before allowing them to leave a message for the user. You can also indicate whether all callers hear the recording or only unidentified callers:</p> <ul style="list-style-type: none"> 0—Do Not Play Recording. Select this setting to disable the feature. Before they leave a message, callers hear only the user greeting. 1—Play Recording to All Callers. Before they leave a message, users and outside callers hear the user or call handler greeting and then the recording. 2—Play Recording Only to Unidentified Callers. Before they leave a message, outside callers hear the user greeting and then the post-greeting recording. Likewise, users who call from a phone that is not associated with their account and do not sign in to Connection hear the post-greeting recording.

Table A-2 Required and Optional CSV Fields for Users With Voice Mailboxes (continued)

Column Heading	Creating	Updating	Deleting	Description
PostGreetingRecordingDisplay Name	Optional	Optional	N/A	The display name of the post-greeting recording that plays after the greeting for this user.
ForcedAuthoizationCode	Optional	Optional	N/A	<p>The required forced-authorization code (FACs) to transmit to Cisco Unified Communications Manager (CM), if applicable, when the user makes an outbound call.</p> <p>Your organization may use FACs to prevent toll fraud. For example, users may have to provide FACs to place long-distance calls.</p> <p>The value is used only if the system is using Cisco Unified CM and if the version of Cisco Unified CM is 4.1 and later.</p> <p>The code length can be from 1 to 40 characters.</p>
ListInDirectory	Optional	Optional	N/A	<p>Determines whether the user is included in the phone directory for outside callers:</p> <ul style="list-style-type: none"> 0—Not included in the directory 1—Included in the directory
CreateSmtproxyFromCorp	Optional	Optional	N/A	<p>Determines whether Connection will use the value in the EmailAddress column (Corporate Email Address field in Cisco Unity Connection Administration) to automatically create a new SMTP proxy address, so that IMAP messages to or from this email address can be properly identified by Connection as belonging to this user. If you uncheck it, no such SMTP proxy address will be automatically created.</p> <ul style="list-style-type: none"> 0—SMTP proxy address will not be automatically created. 1—SMTP proxy address will be automatically created using the Corporate Email Address field.
MediaSwitchDisplayName	Optional	Optional	N/A	<p>The text name displayed on the system administration interface of the phone system used for Telephone Record and Playback (TRAP) sessions and to turn message waiting indicators on and off.</p> <p>Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.</p>
PhoneNumber_HomePhone	Optional	Optional	N/A	<p>The user home phone number.</p> <p>Any combination of the digits 0–9, T, t, commas, hashes (#), and asterisks (*), up to a maximum of 38 characters.</p>
Active_HomePhone	Optional	Optional	N/A	<p>Whether the user home phone device is enabled:</p> <ul style="list-style-type: none"> 0—disabled 1—enabled

Table A-2 Required and Optional CSV Fields for Users With Voice Mailboxes (continued)

Column Heading	Creating	Updating	Deleting	Description
DisplayName_HomePhone	Optional	Optional	N/A	The text name for the user home phone displayed on the Cisco Unity Connection interfaces. Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.
PhoneNumber_WorkPhone	Optional	Optional	N/A	The user work phone number. Any combination of the digits 0–9, T, t, commas, hashes (#), and asterisks (*), up to a maximum of 38 characters.
Active_WorkPhone	Optional	Optional	N/A	Whether the user work phone device is enabled: <ul style="list-style-type: none"> 0—disabled 1—enabled
DisplayName_WorkPhone	Optional	Optional	N/A	The text name for the user work phone displayed on the Cisco Unity Connection interfaces. Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.
PhoneNumber_MobilePhone	Optional	Optional	N/A	The user mobile phone number. Any combination of the digits 0–9, T, t, commas, hashes (#), and asterisks (*), up to a maximum of 38 characters.
Active_MobilePhone	Optional	Optional	N/A	Whether the user mobile phone device is enabled: <ul style="list-style-type: none"> 0—disabled 1—enabled
DisplayName_MobilePhone	Optional	Optional	N/A	The text name for the user mobile phone displayed on the Cisco Unity Connection interfaces. Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.
PhoneNumber_Pager	Optional	Optional	N/A	The user pager number. Any combination of the digits 0–9, T, t, commas, hashes (#), and asterisks (*), up to a maximum of 38 characters.
AfterDialDigits_Pager	Optional	Optional	N/A	Digits to send to the pager. This is referred to in Connection Administration as “Extra Digits.” For numeric pagers, the field holds numeric text to send to the pager; for text pagers, the field is blank. The maximum length is 32 digits.
Active_Pager	Optional	Optional	N/A	Whether the user pager device is enabled: <ul style="list-style-type: none"> 0—disabled 1—enabled
DisplayName_Pager	Optional	Optional	N/A	The text name for the user pager displayed on the Cisco Unity Connection interfaces. Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.

Table A-2 Required and Optional CSV Fields for Users With Voice Mailboxes (continued)

Column Heading	Creating	Updating	Deleting	Description
PhoneNumber_TextPager1	Optional	Optional	N/A	This phone number will be entered in the From field on the default SMTP device for the user. Any combination of ASCII only alphanumeric characters, hyphens, underscores, periods, at signs (“@”), commas and hashes (#), up to a maximum of 40 characters.
SmtpAddress_TextPager1	Optional	Optional	N/A	Message notifications for the user are sent to this SMTP address. Note that the SMTP address cannot include non-ASCII characters.
Active_TextPager1	Optional	Optional	N/A	Whether the user text pager device is enabled: <ul style="list-style-type: none"> 0—disabled 1—enabled
DisplayName_TextPager1	Optional	Optional	N/A	The text name for the user text pager displayed on the Cisco Unity Connection interfaces. Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.
Extension_Alt1	Optional	Optional	N/A	The first alternate extension for the user. The value must be unique in the partition. Any combination of ASCII alphanumeric characters, from 1 to 40 characters long.
Extension_Alt1_Partition	Optional	Optional	N/A	The text name of the partition to which the first alternate extension belongs.
Extension_Alt2	Optional	Optional	N/A	The second alternate extension for the user. The value must be unique in the partition. Any combination of ASCII alphanumeric characters, from 1 to 40 characters long.
Extension_Alt2_Partition	Optional	Optional	N/A	The text name of the partition to which the second alternate extension belongs.
Extension_Alt3	Optional	Optional	N/A	The third alternate extension for the user. The value must be unique in the partition. Any combination of ASCII alphanumeric characters, from 1 to 40 characters long.
Extension_Alt3_Partition	Optional	Optional	N/A	The text name of the partition to which the third alternate extension belongs.
Extension_Alt4	Optional	Optional	N/A	The fourth alternate extension for the user. The value must be unique in the partition. Any combination of ASCII alphanumeric characters, from 1 to 40 characters long.

Table A-2 Required and Optional CSV Fields for Users With Voice Mailboxes (continued)

Column Heading	Creating	Updating	Deleting	Description
Extension_Alt4_Partition	Optional	Optional	N/A	The text name of the partition to which the fourth alternate extension belongs.
Extension_Alt5	Optional	Optional	N/A	The fifth alternate extension for the user. The value must be unique in the partition. Any combination of ASCII alphanumeric characters, from 1 to 40 characters long.
Extension_Alt5_Partition	Optional	Optional	N/A	The text name of the partition to which the fifth alternate extension belongs.
Extension_Alt6	Optional	Optional	N/A	The sixth alternate extension for the user. The value must be unique in the partition. Any combination of ASCII alphanumeric characters, from 1 to 40 characters long.
Extension_Alt6_Partition	Optional	Optional	N/A	The text name of the partition to which the sixth alternate extension belongs.
Extension_Alt7	Optional	Optional	N/A	The seventh alternate extension for the user. The value must be unique in the partition. Any combination of ASCII alphanumeric characters, from 1 to 40 characters long.
Extension_Alt7_Partition	Optional	Optional	N/A	The text name of the partition to which the seventh alternate extension belongs.
Extension_Alt8	Optional	Optional	N/A	The eighth alternate extension for the user. The value must be unique in the partition. Any combination of ASCII alphanumeric characters, from 1 to 40 characters long.
Extension_Alt8_Partition	Optional	Optional	N/A	The text name of the partition to which the eighth alternate extension belongs.
Extension_Alt9	Optional	Optional	N/A	The ninth alternate extension for the user. The value must be unique in the partition. Any combination of ASCII alphanumeric characters, from 1 to 40 characters long.
Extension_Alt9_Partition	Optional	Optional	N/A	The text name of the partition to which the ninth alternate extension belongs.
CcmId	Optional	Optional	N/A	The Cisco Unified Communications Manager user ID that is associated with the user. Any combination of characters except for non-printing ASCII characters, up to a maximum of 128 characters.

Table A-2 Required and Optional CSV Fields for Users With Voice Mailboxes (continued)

Column Heading	Creating	Updating	Deleting	Description
Exchange2003Service_ServiceDisplayName (<i>Cisco Unity Connection 8.0 and later</i>)	Optional	Optional	N/A	<p>The display name of the Exchange 2003 external service that corresponds with the Exchange 2003 server that contains the Exchange 2003 mailbox for this Connection user.</p> <p>To add an Exchange 2003 external service for a user, include values for both the Exchange2003Service_ServiceDisplayName and Exchange2003Service_EmailAddress fields in the CSV input file.</p> <p>To remove the Exchange 2003 service for a user, set at least one of either the Exchange2003Service_ServiceDisplayName and Exchange2003Service_EmailAddress fields to %null% in the CSV input file.</p>
Exchange2003Service_EmailAddress (<i>Cisco Unity Connection 8.0 and later</i>)	Optional	Optional	N/A	<p>The primary email address that is associated with the Exchange mailbox that you want this Connection user to be able to access.</p> <p>To add an Exchange 2003 external service for a user, include values for both the Exchange2003Service_ServiceDisplayName and Exchange2003Service_EmailAddress fields in the CSV input file.</p>
Exchange2003Service_UserId (<i>Cisco Unity Connection 8.0 and later</i>)	Optional	Optional	N/A	<p>The User ID setting in Exchange 2003 (useful when the setting is different from the Connection user alias).</p> <p>To add an Exchange 2003 external service for a user, include values for both the Exchange2003Service_ServiceDisplayName and Exchange2003Service_EmailAddress fields in the CSV input file.</p>
Exchange2007Service_ServiceDisplayName (<i>Cisco Unity Connection 8.0 and later</i>)	Optional	Optional	N/A	<p>The display name of the Exchange 2007 external service that corresponds with the Exchange 2007 server that contains the Exchange 2007 mailbox for this Connection user.</p> <p>To add an Exchange 2007 external service for a user, include values for both the Exchange2007Service_ServiceDisplayName and Exchange2007Service_EmailAddress fields in the CSV input file.</p> <p>To remove the Exchange 2007 service for a user, set at least one of either the Exchange2007Service_ServiceDisplayName and Exchange2007Service_EmailAddress fields to %null% in the CSV input file.</p>

Table A-2 Required and Optional CSV Fields for Users With Voice Mailboxes (continued)

Column Heading	Creating	Updating	Deleting	Description
Exchange2007Service_Email Address (<i>Cisco Unity Connection 8.0 and later</i>)	Optional	Optional	N/A	<p>The primary email address that is associated with the Exchange mailbox that you want this Connection user to be able to access.</p> <p>To add an Exchange 2007 external service for a user, include values for both the Exchange2007Service_ServiceDisplayName and Exchange2007Service_EmailAddress fields in the CSV input file.</p>
Exchange2007Service_UserId (<i>Cisco Unity Connection 8.0 and later</i>)	Optional	Optional	N/A	The Windows domain alias for the user in Exchange 2007 (useful when the setting is different from the Connection user alias).
Exchange2007Service_User Password (<i>Cisco Unity Connection 8.0 and later</i>)	Optional	Optional	N/A	The Windows domain password for the user.
Exchange2010Service_ServiceDisplayName (<i>Cisco Unity Connection 8.0 and later</i>)	Optional	Optional	N/A	<p>The display name of the Exchange 2010 external service that corresponds with the Exchange 2010 server that contains the Exchange 2010 mailbox for this Connection user.</p> <p>To add an Exchange 2010 external service for a user, include values for both the Exchange2010Service_ServiceDisplayName and Exchange2010Service_EmailAddress fields in the CSV input file.</p> <p>To remove the Exchange 2010 service for a user, set at least one of either the Exchange2010Service_ServiceDisplayName and Exchange2010Service_EmailAddress fields to %null% in the CSV input file</p>
Exchange2010Service_Email Address (<i>Cisco Unity Connection 8.0 and later</i>)	Optional	Optional	N/A	<p>The primary email address that is associated with the Exchange mailbox that you want this Connection user to be able to access.</p> <p>To add an Exchange 2010 external service for a user, include values for both the Exchange2010Service_ServiceDisplayName and Exchange2010Service_EmailAddress fields in the CSV input file</p>
Exchange2010Service_UserId (<i>Cisco Unity Connection 8.0 and later</i>)	Optional	Optional	N/A	The Windows domain alias for the user in Exchange 2010 (useful when the setting is different from the Connection user alias).
Exchange2010Service_User Password (<i>Cisco Unity Connection 8.0 and later</i>)	Optional	Optional	N/A	The Windows domain password for the user.

Table A-2 Required and Optional CSV Fields for Users With Voice Mailboxes (continued)

Column Heading	Creating	Updating	Deleting	Description
EmailAction	Optional	Optional	N/A	Action to take for a voice message: <ul style="list-style-type: none"> • 0—Reject the message • 1—Accept the message • 2—Relay the message • 3—Accept the message and relay a copy
VoiceMailAction	Optional	Optional	N/A	Action to take for a voice message: <ul style="list-style-type: none"> • 0—Reject the message • 1—Accept the message • 2—Relay the message • 3—Accept the message and relay a copy
FaxAction	Optional	Optional	N/A	Action to take for a voice message: <ul style="list-style-type: none"> • 0—Reject the message • 1—Accept the message • 2—Relay the message • 3—Accept the message and relay a copy
DeliveryReceiptAction	Optional	Optional	N/A	Action to take for a voice message: <ul style="list-style-type: none"> • 0—Reject the message • 1—Accept the message • 2—Relay the message • 3—Accept the message and relay a copy
RelayAddress	Optional	Optional	N/A	Specifies the address to relay incoming message when one or more of the actions (EmailAction, VoicemailAction, FaxAction, DeliveryReceiptAction) is set to 2 (Relay the message). RelayAddress is in the format of someone@somewhere or someone@somewhere.com.
SmtpProxyAddresses	Optional	Optional	N/A	The full SMTP proxy addresses for users. To create/update more than one address per user, separate them by commas and surround them all with double quotes. For example: "someone1@somewhere.com,someone2@somewhere.com"

Table A-2 Required and Optional CSV Fields for Users With Voice Mailboxes (continued)

Column Heading	Creating	Updating	Deleting	Description
LdapCcmUserID	Optional	Optional	N/A	<p>The value of the LDAP field that you mapped to the Connection Alias field when you configured Cisco Unity Connection to integrate with an LDAP directory by using the procedures in the “Integrating Cisco Unity Connection 8.x with an LDAP Directory” section.</p> <p>This field is used when you create Connection users by importing LDAP user data and when you integrate existing Connection users with LDAP users. For more information, see the applicable section:</p> <ul style="list-style-type: none"> • Creating Cisco Unity Connection 8.x Users from LDAP Data by Using the Bulk Administration Tool, page 12-3 • Integrating Existing Connection User Accounts with LDAP User Accounts Using Bulk Administration Tool (Cisco Unity Connection 8.5 and Later Only), page 12-7
CorporatePhoneNumber	Optional	Optional	N/A	<p>The phone number of the user.</p> <p>Note that the field is only for directory information purposes. Cisco Unity Connection does not use the phone number to route calls.</p>

Table A-3 Required and Optional CSV Fields for Contacts

Column Heading	Creating	Updating	Deleting	Description
Alias	Required	Required	Required	<p>The unique text name for the contact.</p> <p>Any combination of ASCII or Unicode alphanumeric characters, periods, commas, spaces, and the special characters ` , ~ , ! , @ , # , \$, % , ^ , & , - , _ , ' , up to a maximum of 64 characters.</p>
Extension	Required	Optional	N/A	<p>The number that callers dial to reach the contact.</p> <p>The value must be unique among users and contacts in the partition.</p> <p>Any combination of ASCII alphanumeric characters, up to a maximum of 40 characters.</p>
ContactTemplateAlias	Optional	N/A	N/A	The unique text name for the contact template to apply to the contact during creation.

Table A-3 Required and Optional CSV Fields for Contacts (continued)

Column Heading	Creating	Updating	Deleting	Description
AltFirstNames	Optional	Optional	N/A	<p>An alternate version of the first name. Connection considers alternate names when users and callers use voice recognition to place a call or address voice messages.</p> <p>To create/update more than one alternate first name per contact, separate them by semicolons (;). If an alternate name needs to contain a semicolon, precede the semicolon with another semicolon to indicate to Connection that the name contains a semicolon.</p> <p>Use this field in conjunction with the AltLastNames field to add nicknames or maiden names for users. You can also use alternate names to add phonetic spellings of hard-to-pronounce names.</p> <p>Alternate first names and alternate last names are stored as a pair in the database. When submitting multiple alternate names, make sure that you have the same number of alternate first names and alternate last names.</p> <p>For example, if you have a contact named Elizabeth Brown, who is sometimes known as “Liz” and sometimes known by her maiden name of “Smith,” you would enter the following AltFirstNames and AltLastNames to ensure that all four combinations are submitted to the database:</p> <ul style="list-style-type: none"> Elizabeth; Liz; Elizabeth; Liz Brown; Brown; Smith; Smith
AltLastNames	Optional	Optional	N/A	<p>An alternate version of the last name. Connection considers alternate names when users and callers use voice recognition to place a call or address voice messages.</p> <p>To create/update more than one alternate last name per contact, separate them by semicolons (;). If an alternate name needs to contain a semicolon, precede the semicolon with another semicolon to indicate to Connection that the name contains a semicolon.</p> <p>Use this field in conjunction with the AltFirstNames field to add nicknames or maiden names for users. You can also use alternate names to add phonetic spellings of hard-to-pronounce names.</p> <p>Alternate first names and alternate last names are stored as a pair in the database. When submitting multiple alternate names, make sure that you have the same number of alternate first names and alternate last names.</p> <p>For example, if you have a contact named Elizabeth Brown, who is sometimes known as “Liz” and sometimes known by her maiden name of “Smith,” you would enter the following AltFirstNames and AltLastNames to ensure that all four combinations are submitted to the database:</p> <ul style="list-style-type: none"> Elizabeth; Liz; Elizabeth; Liz Brown; Brown; Smith; Smith

Table A-3 Required and Optional CSV Fields for Contacts (continued)

Column Heading	Creating	Updating	Deleting	Description
DisplayName	Optional	Optional	N/A	<p>The contact name that appears on the administration and user interfaces.</p> <p>If no value is provided, the value is set to the Alias.</p> <p>Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.</p>
FirstName	Optional	Optional	N/A	<p>The contact first name.</p> <p>Any combination of ANSI or Unicode alphanumeric characters, periods, commas, spaces, and the special characters ` , ~ , ! , @ , # , \$, % , ^ , & , - , _ , ' , up to a maximum of 64 characters.</p>
LastName	Optional	Optional	N/A	<p>The contact last name.</p> <p>Any combination of ANSI or Unicode alphanumeric characters, periods, commas, spaces, and the special characters ` , ~ , ! , @ , # , \$, % , ^ , & , - , _ , ' , up to a maximum of 64 characters.</p>
ListInDirectory	Optional	Optional	N/A	<p>Determines whether the contact is included in the phone directory for outside callers:</p> <ul style="list-style-type: none"> 0—Not included in the directory 1—Included in the directory
RemoteMailAddress	Optional	Optional	N/A	<p>For VPIM contacts, enter the mailbox number of the VPIM contact on the remote voice messaging system.</p> <p>The maximum length is 256 characters.</p>
TransferEnabled	Optional	Optional	N/A	<p>Determines whether Cisco Unity Connection transfers calls from the automated attendant or a directory handler to the phone number that is specified in the TransferExtension field.</p> <ul style="list-style-type: none"> 0—Do not transfer calls. Connection takes a message and sends it to the remote mailbox for the VPIM contact instead. 1—Transfer incoming calls to TransferExtension.
TransferExtension	Optional	Optional	N/A	<p>The extension or phone number to which Cisco Unity Connection transfers calls when TransferEnabled is set to 1.</p> <p>When entering a phone number, include any additional numbers necessary to dial outside calls (for example, 9) and for long-distance dialing (for example, 1).</p> <p>Any combination of numeric digits, commas, and the special characters # and *, up to a maximum of 40 characters.</p>
TransferRings	Optional	Optional	N/A	<p>Determines the number of times the extension of the contact rings before Cisco Unity Connection considers the call unanswered (“ring-no-answer”) and plays the applicable greeting.</p> <p>An integer value from 2 through 100.</p>

Table A-3 Required and Optional CSV Fields for Contacts (continued)

Column Heading	Creating	Updating	Deleting	Description
TransferType	Optional	Optional	N/A	Determines the way in which Cisco Unity Connection transfers calls from the automated attendant or a directory handler to the contact phone for the standard (default) transfer rule: <ul style="list-style-type: none"> 0—supervised 1—unsupervised (also called a “Release to Switch” transfer)
DeliveryLocation DisplayName	Optional	Optional	N/A	For VPIM contacts, the VPIM delivery location on which the contact mailbox resides. Use the display name of the VPIM location as it is listed in Cisco Unity Connection Administration. Any combination of ASCII or Unicode characters (except nonprinting ASCII characters), up to maximum of 64 characters.
PartitionDisplayName	Optional	Optional	N/A	The display name of the partition to which the contact belongs.
SmtpProxyAddresses	Optional	Optional	N/A	The full SMTP proxy addresses for contacts. To create/update more than one address per user, separate them by commas and surround them all with double quotes. For example: “someone1@somewhere.com,someone2@somewhere.com”
DialableWorkPhone	Optional	Optional	N/A	A phone number that voice recognition users can use to call the contact. Include any additional numbers necessary to dial outside calls (for example, 9) and for long-distance dialing (for example, 1). Any combination of numeric digits, commas, and the special characters # and *, from 1 to 255 characters long.
DialableHomePhone	Optional	Optional	N/A	A phone number that voice recognition users can use to call the contact. Include any additional numbers necessary to dial outside calls (for example, 9) and for long-distance dialing (for example, 1). Any combination of numeric digits, commas, and the special characters #, and *, from 1 to 255 characters long.
DialableMobilePhone	Optional	Optional	N/A	A phone number that voice recognition users can use to call the contact. Include any additional numbers necessary to dial outside calls (for example, 9) and for long-distance dialing (for example, 1). Any combination of numeric digits, commas, and the special characters #, and *, from 1 to 255 characters long.

Table A-3 *Required and Optional CSV Fields for Contacts (continued)*

Column Heading	Creating	Updating	Deleting	Description
City	Optional	Optional	N/A	<p>The name of a locality, such as a city, county or other geographic region where the contact is located, or with which the contact is associated.</p> <p>Callers who reach a voice-enabled directory handler can narrow down their search for a contact by saying the name and city of the contact if this field is defined for the contact. (ListInDirectory must also be set to 1 for the contact to be reachable via directory handlers.)</p> <p>Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.</p>
Department	Optional	Optional	N/A	<p>The name or number for the department or subdivision of an organization to which the contact belongs.</p> <p>Callers who reach a voice-enabled directory handler can narrow down their search for a contact by saying the name and department of the contact if this field is defined for the contact. (ListInDirectory must also be set to 1 for the contact to be reachable via directory handlers.)</p> <p>Any combination of ASCII or Unicode characters, up to a maximum of 64 characters.</p>

Table A-4 *Required and Optional CSV Fields for Distribution Lists*

Column Heading	Creating	Updating	Deleting	Description
Alias	Required	Required	Required	<p>The unique text name for the distribution list.</p> <p>Any combination of ASCII or Unicode alphanumeric characters, periods, commas, spaces, and the special characters ` , ~ , ! , @ , # , \$, % , ^ , & , - , _ , ' , up to a maximum of 64 characters.</p>
Display Name	Required	Optional	N/A	The name of the distribution list.
AltNames	Optional	Optional	N/A	<p>An alternate version of the name. Connection considers alternate names when users or contacts use voice recognition to place a call or address voice messages.</p> <p>To create/update more than one alternate name distribution list, separate them by semicolons (;). If an alternate name needs to contain a semicolon, precede the semicolon with another semicolon to indicate to Connection that the name contains a semicolon.</p>
Extension	Optional	Optional	N/A	<p>The number that callers dial to reach the distribution list.</p> <p>Any combination of ASCII alphanumeric characters, up to a maximum of 40 characters.</p>
AllowContacts	Optional	Optional	N/A	Allows contacts to be added as members of the distribution list.
AllowForeignMessage	Optional	Optional	N/A	Allows users on remote voice messaging systems that are configured as VPIM locations to send messages to this distribution list.

Table A-4 Required and Optional CSV Fields for Distribution Lists (continued)

Column Heading	Creating	Updating	Deleting	Description
PartitionName	Optional	Optional	N/A	The name of the partition to which the distribution list belongs.

Table A-5 Required and Optional CSV Fields for Distribution List Members

Column Heading	Creating	Deleting	Description
•			
DLAlias	Required	Required	The unique text name of the distribution list to which the member belongs.
MemberAlias	Required	Required	The unique text name of the member (a user, contact, user template, or another distribution list).
LocationName	Optional	Optional	The display name of the location where the member is homed. By default, this is the display name of the local system.

Table A-6 Required and Optional CSV Fields for Unified Messaging Accounts

Column Heading	Creating	Updating	Deleting	Description
subscriberAlias	Required	Optional. See Description	Optional. See Description	The alias of the Connection user for which you want to add a unified messaging account. Note the following: <ul style="list-style-type: none"> When creating unified messaging accounts, this column is required. When updating and deleting unified messaging accounts, we recommend that you use OptionalServiceAccountID to identify the unified messaging accounts that you want to update or delete. You can also use subscriberAlias and serviceDisplayName.
serviceDisplayName	Required	Optional. See Description	Optional. See Description	The descriptive name for the unified messaging service that you want to associate with this unified messaging account. Note the following: <ul style="list-style-type: none"> When creating unified messaging accounts, this column is required. When updating and deleting unified messaging accounts, we recommend that you use OptionalServiceAccountID to identify the unified messaging accounts that you want to update or delete. You can also use subscriberAlias and serviceDisplayName.

Table A-6 Required and Optional CSV Fields for Unified Messaging Accounts (continued)

Column Heading	Creating	Updating	Deleting	Description
OptionalServiceAccountID	Omit	Recommended. See Description	Recommended. See Description	<p>A unique identifier that distinguishes multiple unified messaging accounts for the same Connection user. Note the following:</p> <ul style="list-style-type: none"> When creating unified messaging accounts, leave this column blank. When updating and deleting unified messaging accounts, we recommend that you use OptionalServiceAccountID to identify the unified messaging accounts that you want to update or delete. You can also use subscriberAlias and serviceDisplayName.
UMEmailAddress	Optional	Optional	Optional	<p><i>Exchange only:</i> If you set the emailAddressUseCorp to:</p> <ul style="list-style-type: none"> 0—Enter the Exchange email address that you want Connection to access for unified messaging features for this user. 1—Leave this field blank. If you enter a value, Connection will ignore it.
emailAddressUseCorp	Optional	Optional	Optional	<p><i>Exchange only:</i> Determines which Exchange email address to access for unified messaging features:</p> <ul style="list-style-type: none"> 0—Do not use the EmailAddress column in Table A-2, which corresponds with the Corporate Email Address field on the New and Edit User Basics pages. Instead, use the UMEmailAddress column in this table, which is associated with the Use This Email Address option on the New or Edit Unified Messaging Account pages. 1—Use the EmailAddress column in Table A-2, which corresponds with the Corporate Email Address field on the New and Edit User Basics pages.
enableCalendar	Optional	Optional	Optional	<p><i>Exchange only:</i> Determines whether calendar and contact functionality is enabled for this user:</p> <ul style="list-style-type: none"> 0—Not enabled 1—Enabled
enableMeeting	Optional	Optional	Optional	<p><i>Cisco Unified MeetingPlace only:</i> Determines whether the MeetingPlace Scheduling and Joining feature is enabled for this user.</p> <ul style="list-style-type: none"> 0—Not enabled 1—Enabled <p>If the feature is not enabled in the unified messaging service specified by serviceDisplayName, the value that you specify here, if any, is ignored.</p>

Table A-6 Required and Optional CSV Fields for Unified Messaging Accounts (continued)

Column Heading	Creating	Updating	Deleting	Description
enableMbxSynch	Optional	Optional	Optional	<p><i>Exchange only:</i> Determines whether the Synchronize Connection and Exchange Mailboxes (single inbox) feature is enabled for this user.</p> <ul style="list-style-type: none"> 0—Not enabled 1—Enabled <p>If the feature is not enabled in the unified messaging service specified by serviceDisplayName, the value that you specify here, if any, is ignored.</p>
enableTts	Optional	Optional	Optional	<p>Determines whether the Text To Speech feature is enabled for this user. This field is only relevant if Text to Speech is enabled in class of service of users.</p> <ul style="list-style-type: none"> 0—Not enabled 1—Enabled
isPrimaryMeetingService	Optional	Optional	Optional	<p><i>Cisco Unified MeetingPlace only:</i> Determines whether MeetingPlace meetings will be set up through the server listed in the unified messaging service specified by serviceDisplayName.</p> <ul style="list-style-type: none"> 0—MeetingPlace meetings will be set up through a different server. 1—MeetingPlace meetings will be set up through the server listed in the service specified by serviceDisplayName.

Table A-6 Required and Optional CSV Fields for Unified Messaging Accounts (continued)

Column Heading	Creating	Updating	Deleting	Description
loginType	See Description	Optional	Optional	<p>Required when creating unified messaging accounts for MeetingPlace.</p> <p>Required when creating unified messaging accounts for Exchange when all of the following are true:</p> <ul style="list-style-type: none"> You are creating users. You want the user to be able to access Exchange email by using text to speech. The Exchange mailbox for this Connection user is homed in Exchange 2003. The unified messaging service identified by serviceDisplayName specifies an Exchange 2003 server (instead of allowing Connection to search for an Exchange server). <p>If you specify a loginType of:</p> <ul style="list-style-type: none"> 0—Connection will use the Connection alias to sign in to MeetingPlace or Exchange 2003 for this user. 1—Connection will sign in by using the MeetingPlace server guest account. Do not specify this value if you are configuring the user to access Exchange 2003. 2—Connection will use the value specified in the userID column to sign in to MeetingPlace or Exchange 2003 for this user. The value of the userID column corresponds with the User ID field on the New and Edit Unified Messaging Accounts pages.
userId	See Description	Optional	Optional	<p>Required when creating unified messaging accounts for MeetingPlace.</p> <p>Required when creating unified messaging accounts for Exchange when all of the following are true:</p> <ul style="list-style-type: none"> You are creating users. You want the user to be able to access Exchange email by using text to speech. The Exchange mailbox for this Connection user is homed in Exchange 2003. The unified messaging service identified by serviceDisplayName specifies an Exchange 2003 server (instead of allowing Connection to search for an Exchange server). You specify a loginType of 2.

Correcting Errors by Using the Failed Objects File in Cisco Unity Connection 8.x

When you run BAT, it copies each record that it cannot process to a failed objects report file, along with the reason that the record was not processed correctly. For example, in the following CSV file, the first record includes an invalid entry for the Country field, and the second record specifies a template that is not a voicemail user template:

```
Alias, City, PostalCode, State, Country, TemplateAlias
Jsmith, Beverly Hills, 90210, Ca., United States, VoiceMailUserTemplate
BRobertson, Seattle, 98121, WA, US, AdminUserTemplate
```

Using this file to create users with voice mailboxes produces the following failed objects file:

```
FailureReason, alias, city, postalcode, state, country, templatealias
United States is invalid for column Country|, Jsmith, Beverly Hills, 90210, Ca., United States,
VoiceMailUserTemplate
Object not found or is not a template: Parameter = [@TemplateObjectId], Table =
[vw_SubscriberTemplate], Column = [Alias,ObjectId], BRobertson, Seattle, 98121, WA, US,
AdminUserTemplate
```

The FailureReason column—which provides information about the invalid data—is added before the first column.

To correct errors, do the following procedure to modify the failed objects file, rename it, and use it as the input file when you re-run BAT.

Note that depending on the type of problem with the data in the CSV file, for each problem record, BAT may report multiple errors or only the first error encountered. Therefore, after you correct errors, BAT may detect additional errors in the same record when the data is processed again. Thus, you may need to repeat the correction process—running the tool and correcting an error—several times to find and correct all errors.

To Correct Errors by Using the Failed Objects File

- Step 1** If the Bulk Administration Tool operation results in any failures, you can immediately inspect the failed objects report file by selecting **Download the Failed Objects File**.
- Step 2** Open the file and correct all problems with the data, as indicated by the information in the FailureReason column for each record.
- Step 3** Remove the FailureReason column or change the heading to “junk.”
- Step 4** When you have finished modifying the data, save the file as a CSV file with a new name.
- Step 5** Run BAT again with the CSV file that you saved in [Step 4](#) as the input file.
Note that each time that you run BAT, the failed objects file is overwritten (unless you specify a new name for the file each time you run the tool).
- Step 6** Repeat this procedure until all records are processed without error.



Note

If you have navigated away from the Bulk Administration Tool page, you can go back and select the Display Last Operation button to bring up a download link for the output file from the previous operation. If you need a failed objects file from more than one previous operation, you can use the

Command Line Interface (CLI) command “file view activelog cuc/<filename>” to view failed object files. For more information on using CLI commands, see the applicable *Cisco Unified Communications Operating System Administration Guide for Cisco Unity Connection*. The guide is available at http://www.cisco.com/en/US/products/ps6509/prod_maintenance_guides_list.html.
