



## CHAPTER 5

# Migrating from Cisco Unity 4.x or Later to Cisco Unity Connection 7.x

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- [Preparing to Create User Accounts by Using Multiple Templates, page 5-8](#)
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## About the Tools Used for Migrating from Cisco Unity 4.x or Later to Connection 7.x

**Revised May 2009**

To migrate user data and, optionally, voice messages from a Cisco Unity 4.x or later system to Connection 7.x, you must export the data and messages from the Cisco Unity system by using one of the tools described in the following sections:

- [COBRAS \(Cisco Objected Backup and Restore Application Suite\)](#)
- [Cisco Unity 4.x to Connection 2.x Migration Export tool](#)

## COBRAS (Cisco Objected Backup and Restore Application Suite)

Advantages of using this tool:

- Exports more data than the Cisco Unity 4.x to Connection 2.x Migration Export tool. For more information, see COBRAS Help at <http://www.ciscounitytools.com/Applications/COBRAS/Help/COBRAS.htm>.
- Does not require a server running a secure shell (SSH) server application.

Disadvantage of using this tool:

- Can export data only from Cisco Unity 4.0(5) and later.

COBRAS is available at [http://www.ciscounitytools.com/App\\_COBRAS.htm](http://www.ciscounitytools.com/App_COBRAS.htm).

## Cisco Unity 4.x to Connection 2.x Migration Export tool



### Note

Updating the Migration Export tool for Connection version 7.x was unnecessary, so although the tool name includes Connection 2.x, the tool functions correctly for a migration export to 7.x. In addition, although the tool name includes only Cisco Unity version 4.x, the tool functions correctly for an export from versions 5.x and 7.x.

Advantages of using this tool:

- Can export data from Cisco Unity versions 4.0(1) through 4.0(4).
- Potentially useful as a backup migration method in case you encounter problems with COBRAS (Cisco Objected Backup and Restore Application Suite).

Disadvantages of using this tool:

- Exports less data than COBRAS. For detailed information on the data that is exported by the Cisco Unity 4.x to Connection 2.x Migration Export tool, see Help for the tool at <http://www.ciscounitytools.com/HelpFiles/CUC/CUCMigrationExport/UnityToConnectionMigrationExport.htm>.
- Requires a server running a secure shell (SSH) server application to import Cisco Unity 4.x and later data and messages. Configuring an SSH server application can be a complicated and time-consuming process.

The Migration Export tool is available at [http://www.ciscounitytools.com/App\\_CUCMigrationExport.htm](http://www.ciscounitytools.com/App_CUCMigrationExport.htm).



### Note

Exporting Cisco Unity data by using the Cisco Unity 4.x to Connection 2.x Migration Export tool is not required for systems running Cisco Unity 4.0(5) or later. However, we recommend this export as a precautionary measure.

## Task List for Migrating from Cisco Unity 4.x or Later to Connection 7.x

**Revised August 26, 2009**

Use the following high-level task list to migrate to Connection 7.x correctly. The tasks reference detailed instructions in this guide and in other Connection documentation as noted. Follow the documentation for a successful migration.

1. If you are reusing the current Cisco Unity server rather than installing a new server, review the *Cisco Unity Connection Supported Platforms List* to determine whether the server requires replacement hard disks or additional RAM. The *Cisco Unity Connection Supported Platforms List* is available at [http://www.cisco.com/en/US/products/ps6509/products\\_data\\_sheets\\_list.html](http://www.cisco.com/en/US/products/ps6509/products_data_sheets_list.html).

2. Obtain Cisco Unity Connection 7.x license file(s). Do not install them now; you do so later in the migration process. See the “Managing Licenses” chapter of the *System Administration Guide for Cisco Unity Connection Release 7.x* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/administration/guide/7xcucsagx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/administration/guide/7xcucsagx.html).

**Note**

When you are configuring a Connection cluster, the license that has the MAC address of the publisher server must be installed on the publisher server. The license that has the MAC address of the subscriber server must be installed on the subscriber server.

3. Review the “Requirements for Migrating from Cisco Unity 4.x or Later to Cisco Unity Connection Version 7.x” section in *System Requirements for Cisco Unity Connection 7.x* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/requirements/7xcucsysreqs.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/requirements/7xcucsysreqs.html).

4. See the applicable version of *Release Notes for Cisco Unity Connection* for additional information on the shipping version of Cisco Unity Connection. In particular, note the items in the section “Installation and Upgrade Information.” Release notes are available at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/release/notes/701cucrn.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/release/notes/701cucrn.html).

5. *Optional but recommended if the Cisco Unity server is running version 4.0(1) through 4.0(4):* Download the software for upgrading to Cisco Unity 4.0(5) or later. For more information, see the section on downloading software in the applicable release notes at [http://www.cisco.com/en/US/products/sw/voicew/ps2237/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/sw/voicew/ps2237/prod_release_notes_list.html).

COBRAS, the preferred tool because it exports significantly more data from Cisco Unity, works only with Cisco Unity 4.0(5) or later. The potential time savings associated with using COBRAS significantly outweighs the time required to upgrade Cisco Unity.

6. Download the following tools:
  - The Cisco Unity Disaster Recovery tools, available at [http://www.ciscounitytools.com/App\\_DisasterRecoveryTools.htm](http://www.ciscounitytools.com/App_DisasterRecoveryTools.htm).
  - If the Cisco Unity server is currently running version 4.0(5) or later or if you will upgrade the server to version 4.0(5) or later during the migration, COBRAS, available at [http://www.ciscounitytools.com/App\\_COBRAS.htm](http://www.ciscounitytools.com/App_COBRAS.htm).
  - For Cisco Unity 4.x or later, the Cisco Unity 4.x to Connection 2.x Migration Export tool, [http://www.ciscounitytools.com/App\\_CUCMigrationExport.htm](http://www.ciscounitytools.com/App_CUCMigrationExport.htm)

**Note**

Exporting Cisco Unity data by using the Cisco Unity 4.x to Connection 2.x Migration Export tool is not required for systems running Cisco Unity 4.0(5) or later. However, we recommend this export as a precautionary measure.

7. Install the tools that you downloaded in Step 6.
8. Back up the server by using the Cisco Unity Disaster Recovery tools. This backup will not be used to restore data on the Connection 7.x system; we recommend it only so you can revert to Cisco Unity if necessary.
9. *If you are using Cisco Unity 4.0(1) through 4.0(4) (the versions that are supported by the Cisco Unity 4.x to Connection 2.x Migration Export tool but are not supported by COBRAS), if you are not upgrading to Cisco Unity 4.0(5) or later so you can use COBRAS, and if you do not already*

have a secure shell (SSH) server application installed on a server that is accessible to the Cisco Unity server: Install an SSH server application. The migration tool that imports Cisco Unity data into Connection 7.x uses SSH to access the exported user data and messages.



**Note** Only OpenSSH for Windows was tested, and customers have reported problems migrating using other SSH applications.

10. Use the Cisco Unity 4.x to Connection 2.x Migration Export tool to export Cisco Unity data and messages. If the Cisco Unity server is already running Cisco Unity 4.0(5) or later or if you will be upgrading to version 4.0(5) or later during the migration, you will use the data exported by this tool only if COBRAS fails for some reason. For more information, see Help for the tool at <http://www.ciscounitytools.com/HelpFiles/CUC/CUCMigrationExport/UnityToConnectionMigrationExport.htm>.

If you have a secure shell (SSH) server application installed on a server that is accessible to the Cisco Unity server, export to the SSH server. If you do not have an SSH server, you can export data to any network location. You can set up an SSH server later if necessary.

11. *Optional but recommended:* If the Cisco Unity server is running version 4.0(1) through 4.0(4), upgrade to Cisco Unity 4.0(5) or later. For more information, see the following documentation:
  - The release notes for the applicable version of Cisco Unity at [http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod\\_release\\_notes\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_release_notes_list.html).
  - The applicable upgrade chapter in the applicable Reconfiguration and Upgrade Guide at [http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod\\_installation\\_guides\\_list.html](http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_installation_guides_list.html).

If the upgrade fails (rare but not impossible), you can either troubleshoot the upgrade or use the data that you exported from Cisco Unity by using the Cisco Unity 4.x to Connection 2.x Migration Export tool.

12. *If the Cisco Unity server is running version 4.0(5) or later:* Use COBRAS to export Cisco Unity data and messages. For more information, see Help for the tool at <http://www.ciscounitytools.com/Applications/COBRAS/Help/COBRAS.htm>.
13. *If additional memory or replacement hard disks are required:* Add memory or replace hard disks. See the “Installing a Memory Upgrade or Replacing Hard Disks (Selected Servers Only)” section on page 5-5.
14. Install and begin configuring Connection 7.x. See Part 1 through Part 3 in the “Task List for Installing a Cisco Unity Connection 7.x System (Without a Connection Cluster)” in the “Overview of Mandatory Tasks for Installing a Cisco Unity Connection 7.x System” chapter of the *Installation Guide for Cisco Unity Connection Release 7.x* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/7x/installation/guide/7xcucigx.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/7x/installation/guide/7xcucigx.html).
15. If you exported data and messages by using COBRAS, see the following documentation:
  - The “Importing User Data and Messages by Using COBRAS” section on page 5-8 of this guide.
  - “Part 4: Populating the System with User and Call Management Data” in the “Task List for Installing a Cisco Unity Connection 7.x System (Without a Connection Cluster)” in the “Overview of Mandatory Tasks for Installing a Cisco Unity Connection 7.x System” chapter of the *Installation Guide for Cisco Unity Connection Release 7.x*.

If you exported data only with the Connection 1.x to 2.x Migration Export tool, see:

- “Part 4: Populating the System with User and Call Management Data” in the “Task List for Installing a Cisco Unity Connection 7.x System (Without a Connection Cluster)” in the “[Overview of Mandatory Tasks for Installing a Cisco Unity Connection 7.x System](#)” chapter of the *Installation Guide for Cisco Unity Connection Release 7.x*.
  - [Preparing to Create User Accounts by Using Multiple Templates](#), page 5-8
  - [Importing User Data and Messages by Using the Cisco Unity 4.x to Connection 2.x Migration Export tool](#), page 5-9
16. Finish configuring Connection 7.x. See Part 5 through Part 9 in the “Task List for Installing a Cisco Unity Connection 7.x System (Without a Connection Cluster)” in the “[Overview of Mandatory Tasks for Installing a Cisco Unity Connection 7.x System](#)” chapter of the *Installation Guide for Cisco Unity Connection Release 7.x*.

## Installing a Memory Upgrade or Replacing Hard Disks (Selected Servers Only)



### Note

If you are upgrading a server that does not require a memory upgrade or a hard-disk replacement, skip this section.

Some servers that are qualified for use with Cisco Unity Connection require:

- A memory upgrade to run Connection 7.x in any configuration.
- A memory upgrade to support a specified number of Connection users when both voice recognition and Digital Networking are configured.
- A hard-disk replacement to support a Connection cluster.

See the applicable server-specific table in the *Cisco Unity Connection Supported Platforms List* at [http://www.cisco.com/en/US/products/ps6509/products\\_data\\_sheets\\_list.html](http://www.cisco.com/en/US/products/ps6509/products_data_sheets_list.html).



### Warning

**Before working on a system that has an on/off switch, turn OFF the power and unplug the power cord.** Statement 1



### Warning

**Before opening the chassis, disconnect the telephone-network cables to avoid contact with telephone-network voltages.** Statement 2



### Warning

**This equipment is to be installed and maintained by service personnel only as defined by AS/NZS 3260 Clause 1.2.14.3 Service Personnel.** Statement 88



### Warning

**During this procedure, wear grounding wrist straps to avoid ESD damage to the card. Do not directly touch the backplane with your hand or any metal tool, or you could shock yourself.** Statement 94

**Warning**

**The safety cover is an integral part of the product. Do not operate the unit without the safety cover installed. Operating the unit without the cover in place will invalidate the safety approvals and pose a risk of fire and electrical hazards.** Statement 117

**Warning**

**Do not work on the system or connect or disconnect cables during periods of lightning activity.** Statement 1001

**Warning**

**Read the installation instructions before connecting the system to the power source.** Statement 1004

**Warning**

**To prevent bodily injury when mounting or servicing this unit in a rack, you must take special precautions to ensure that the system remains stable. The following guidelines are provided to ensure your safety:**

- **This unit should be mounted at the bottom of the rack if it is the only unit in the rack.**
- **When mounting this unit in a partially filled rack, load the rack from the bottom to the top with the heaviest component at the bottom of the rack.**
- **If the rack is provided with stabilizing devices, install the stabilizers before mounting or servicing the unit in the rack.** Statement 1006

**Warning**

**There is the danger of explosion if the battery is replaced incorrectly. Replace the battery only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.** Statement 1015

**Warning**

**This unit is intended for installation in restricted access areas. A restricted access area can be accessed only through the use of a special tool, lock and key, or other means of security.** Statement 1017

**Warning**

**To avoid electric shock, do not connect safety extra-low voltage (SELV) circuits to telephone-network voltage (TNV) circuits. LAN ports contain SELV circuits, and WAN ports contain TNV circuits. Some LAN and WAN ports both use RJ-45 connectors. Use caution when connecting cables.** Statement 1021

**Warning**

**To reduce the risk of fire, use only No. 26 AWG or larger telecommunication line cord.** Statement 1023

**Warning**

**This equipment must be grounded. Never defeat the ground conductor or operate the equipment in the absence of a suitably installed ground conductor. Contact the appropriate electrical inspection authority or an electrician if you are uncertain that suitable grounding is available.** Statement 1024

**Warning**

**Blank faceplates and cover panels serve three important functions: they prevent exposure to hazardous voltages and currents inside the chassis; they contain electromagnetic interference (EMI) that might disrupt other equipment; and they direct the flow of cooling air through the chassis. Do not operate the system unless all cards, faceplates, front covers, and rear covers are in place.** Statement 1029

**Warning**

**Only trained and qualified personnel should be allowed to install, replace, or service this equipment.** Statement 1030

**Warning**

**Ultimate disposal of this product should be handled according to all national laws and regulations.** Statement 1040

(For translations of the preceding safety warnings, see *Regulatory Compliance and Safety Information for Cisco Unity Connection* at [http://www.cisco.com/en/US/docs/voice\\_ip\\_comm/connection/regulatory/compliance/ucwarns.html](http://www.cisco.com/en/US/docs/voice_ip_comm/connection/regulatory/compliance/ucwarns.html).)

**To Install a Memory Upgrade or Replace Hard Disks (Selected Servers Only)**

**Step 1** Remove the cover.

**Step 2** If you are not installing a memory upgrade, skip to [Step 3](#).

Install the memory modules in the applicable slots or locations, depending on the server model, as documented in the *Cisco Unity Connection Supported Platforms List* at [http://www.cisco.com/en/US/products/ps6509/products\\_data\\_sheets\\_list.html](http://www.cisco.com/en/US/products/ps6509/products_data_sheets_list.html).

**Caution**

If you install new memory modules in the wrong slots, the server and operating system may not recognize that they have been installed, and Cisco Unity Connection performance may suffer.

**Step 3** If you are not replacing hard disks, skip to [Step 4](#).

**Caution**

You must remove existing hard disks and install exactly as many hard disks as you remove, or Cisco Unity Connection installation will fail.

Replace the hard disks:

- a. Make note of the current locations of the hard disks in the server, including which hard disk is in which hard disk slot. If the replacement fails and you want to revert to the current configuration, you must put the existing hard disks back into their current locations.
- b. Remove the drive trays from the server.
- c. Remove the old hard disks from the drive trays.
- d. Insert the new hard disks into the drive trays.
- e. Reinstall the drive trays in the locations that you made note of in Step a.

- Step 4** Reattach the cover.
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## Preparing to Create User Accounts by Using Multiple Templates

The utility that exports user data from Cisco Unity 4.x creates one CSV file with data for all users, and the utility that imports this data into Connection 7.x creates all of the new user accounts by using the same template. If you want to create user accounts by using two or more templates, you may want to split the CSV file into one file per template. (Depending on how you want to split users among templates, it might be faster to create all user accounts with the same template and then update user settings individually.)

### To Prepare Multiple CSV Files for Creating User Accounts by Using Multiple Templates

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- Step 1** In the location to which you exported Cisco Unity 4.x data, create a subdirectory for each template that you want to use. Give each subdirectory the same name as the corresponding template.
- Step 2** Copy the CSV file to each subdirectory. Use the same filename as the original CSV file, or the import will fail.
- Step 3** Copy all of the recorded-name WAV files from the location to which you exported Cisco Unity 4.x data to each subdirectory that you created in [Step 1](#). Filenames are in the format <user\_alias>\_VOICE\_NAME.wav.

When you import user data from a CSV file, the corresponding recorded-name WAV files are also imported. The import utility looks for these files only in the directory that contains the CSV file from which you are importing.

- Step 4** Open the CSV file in each subdirectory, and delete the rows for the users who you do not want to import by using the corresponding template.

For example, if you were editing the CSV file in a SalesStaffTemplate directory, you would delete all of the rows for all of the users who you do not want to create by using the SalesStaffTemplate.

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## Importing User Data and Messages by Using COBRAS

**Added May 2009**

For extensive information on importing user data and, optionally, messages into Connection 7.0, see the COBRAS Help at <http://www.ciscounitytools.com/Applications/COBRAS/Help/COBRAS.htm>.



# Importing User Data and Messages by Using the Cisco Unity 4.x to Connection 2.x Migration Export tool

**Note**

If you exported data by using the COBRAS tool, see COBRAS Help (<http://www.ciscounitytools.com/Applications/COBRAS/Help/COBRAS.htm>) for information on importing data and messages.

If you exported both user data and messages, you must import user data before you import messages.

**Caution**

Passwords for Cisco Unity web applications cannot be exported because they are stored in Active Directory. When you create new user accounts by importing data, every account will get the same password, which is the password in the template that you specify when you import data.

When you import user data into Cisco Unity Connection 7.x, the Migrate Users utility does not confirm that passwords meet the password requirements specified by Connection credential policies. The first time users log on to Connection 7.x by phone or log on to a web tool, they are prompted to change the password. Credential policies will enforce password requirements. If the user data you import contains any blank passwords, those new user accounts will be created with the default password of the chosen template.

This section contains two procedures, one for importing user data and the other for importing messages.

## To Import User Data Into a Connection 7.x System

- Step 1** In Cisco Unity Connection Administration, expand **Tools**, expand **Migration Utilities**, and click **Migrate Users**.
- Step 2** In the **Server Name or IP Address** field, enter the name or the IP address of the SSH server to which you copied Cisco Unity user data.
- Step 3** In the **Path Name** field, enter the path to the directory that contains the user data that you want to import.  
The format of the path depends on how you configured the SSH server application for access to that directory.
- Step 4** In the **User Name** and **Password** fields, enter the account name and password for an account that has the permissions required to access the server and files to which you exported the data.
- Step 5** For **User Template**, choose the template whose settings you want to apply to all of the users you are creating with the imported data.
- Step 6** In the Failed Objects Filename field, enter the filename for the log file. Connection will save information in the specified file about users whose data could not be imported.
- Step 7** Click **Submit**.  
When the import is finished, the Status displays “Bulk Administration Tool completed,” as well as the number of users for which the import process succeeded and the number for which it failed.
- Step 8** If the import failed for any users, review the file that you specified in [Step 6](#) for information on which user accounts could not be created, and correct the errors as applicable.  
You can ignore errors for accounts that are common to all versions of Connection, for example, Operator and UndeliverableMessagesMailbox.

If the import failed for only a few accounts, it may be faster to create the missing accounts manually in Cisco Unity Connection Administration.

**Caution**

If you create accounts manually and you want to import messages that you exported from Cisco Unity, you must give each account the exact alias and SMTP address that the corresponding Cisco Unity account had. If you give the new account a different alias and/or SMTP address, Connection 7.x will not be able to associate the imported messages with the new accounts.

**Step 9** Correct user data that could not be imported and reimport it, if applicable:

- a. Save the log file locally. This file, which contains only rows for the users who could not be imported, is the file you specified in the Failed Objects Filename field in [Step 6](#).
- b. Correct data in the log file.
- c. Change the name of the log file to match the name of the CSV file that you imported from, UnityMigrationOutput.csv.
- d. Copy the renamed log file into the directory that contains the CSV file that you imported from, and overwrite the original CSV file.
- e. Repeat [Step 2](#) through [Step 8](#) until all of the accounts are successfully imported.

**Caution**

If you exported messages as well as user data, you must successfully create all user accounts before you import messages, or the message import will fail.

**Step 10** If you created more than one CSV file so that you could import by using more than one template, repeat [Step 2](#) through [Step 8](#) for each of the remaining CSV files that you created in the “[To Prepare Multiple CSV Files for Creating User Accounts by Using Multiple Templates](#)” procedure on page 5-8.

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### To Import Messages Into a Connection 7.x System

- Step 1** In Cisco Unity Connection Administration, expand **Tools**, expand **Migration Utilities**, and click **Migrate Messages**.
  - Step 2** In the **Server Name or IP Address** field, enter the name or the IP address of the SSH server to which you exported Cisco Unity user data and messages.
  - Step 3** In the **Path Name** field, enter the path to the directory that contains the messages that you want to import.  
  
The format of the path depends on how you configured the SSH server application for access to that directory.
  - Step 4** In the **User Name** and **Password** fields, enter the account name and password for an account that has the permissions required to access the server and files to which you exported the data.
  - Step 5** Click **Submit**.  
  
When the import is finished, the Status displays “Bulk Administration Tool completed,” as well as the number of messages migrated.
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