



Upgrading a Cisco Unity 2.x System to Version 4.0(3)

This chapter contains the following sections:

- [Task List for Upgrading a Cisco Unity 2.x System to Version 4.0\(3\)](#), page 14-1
- [Verifying System Requirements](#), page 14-4
- [Duration of the Upgrade](#), page 14-5
- [Reviewing the Consistency of the Cisco Unity 2.x Database](#), page 14-6
- [Moving Mailboxes From Exchange 5.5 on the Cisco Unity Server to Exchange 5.5 on a Separate Server](#), page 14-7
- [Backing Up Messages and Other Data](#), page 14-8
- [How the Cisco Unity Database Export Utility Handles Data](#), page 14-9
- [Installing and Running the Cisco Unity Database Export Utility](#), page 14-12
- [Uninstalling Cisco Unity Version 2.x](#), page 14-13
- [Installing Exchange 5.5 or Exchange 5.5 Administration Software](#), page 14-15
- [Importing Windows NT/Active Directory Accounts into Exchange 5.5 \(Selected Configurations Only\)](#), page 14-18
- [Installing and Running the Cisco Unity Database Import Utility](#), page 14-19
- [Reviewing the Consistency of the Cisco Unity 4.0 Database](#), page 14-21
- [Re-entering Custom Data](#), page 14-21

Task List for Upgrading a Cisco Unity 2.x System to Version 4.0(3)

Some of the following tasks apply only to specific situations, and are noted as such. If a task does not apply to your situation, skip it.

If you plan to set up failover for the Cisco Unity system, upgrade the primary server and install the secondary server before you configure them for failover.

1. Verify the following requirements:
 - a. System requirements for the Cisco Unity 4.0 system—including for the failover feature, if applicable. Refer to *Cisco Unity 4.0 System Requirements, and Supported Hardware and Software* at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/sysreq/40_sysrq.htm.
 - b. Requirements for integrating the phone system(s)—including for the failover feature, if applicable. Refer to the “Requirements” section of the applicable Cisco Unity integration guide(s), available at http://www.cisco.com/en/US/products/sw/voicesw/ps2237/prod_configuration_guides_list.html and http://www.cisco.com/en/US/products/sw/voicesw/ps2237/products_configuration_guides_books_list.html.
2. Confirm that Cisco Unity license file(s) are available. If the Information Services manager has not already registered Cisco Unity, do so now. See the “Converting from the System Key to License Files” section on page 13-8.
3. Download the Cisco Unity Database Export utility and the Cisco Unity Database Import utility (also know as FullDbImport). The utilities export subscriber and system information from Cisco Unity 2.x and import the information into Cisco Unity 4.0(3). The utilities are available at http://www.ciscounitytools.com/App_full_import_export4x.htm.

**Caution**

You must use the version of the Database Import utility that you download from CiscoUnityTools.com. Only this version of the utility is compatible with Cisco Unity 4.0(3). Earlier versions of the utility, including the one currently on the Cisco Unity 4.0(3) CDs, can import data only into Cisco Unity 4.0(2) and earlier.

Do not copy the Database Import utility to the Cisco Unity server yet. During the upgrade, you need to repartition the hard disks and reinstall all of the software on the server, so anything stored on the Cisco Unity server will be deleted.

4. Review the information on the amount of time required for the upgrade, if applicable. See the “Duration of the Upgrade” section on page 14-5.
5. Generate and print reports on data for the existing Cisco Unity system, if applicable. Refer to the “Reports” chapter of the *Cisco Unity System Administration Guide, Release 4.0(3)* at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/unity40/sag/sag403/ex/index.htm.

**Caution**

The Cisco Unity Database Export utility does not export data that Cisco Unity uses to generate reports. In addition, during the upgrade process, you delete all the existing Cisco Unity software and data, including data that Cisco Unity uses to generate reports. If you want any reports from the existing Cisco Unity system, generate them now.

6. Review the consistency of the Cisco Unity 2.x database, and fix any errors. See the “Reviewing the Consistency of the Cisco Unity 2.x Database” section on page 14-6.

7. *Only for the Unified Messaging configuration with Exchange 5.5 mailboxes homed on the Cisco Unity server:* Move Exchange 5.5 mailboxes to another Exchange server. (If there are no other Exchange servers, you will need to install Exchange on a separate server.) See the [“Moving Mailboxes From Exchange 5.5 on the Cisco Unity Server to Exchange 5.5 on a Separate Server”](#) section on page 14-7.
8. Back up the Cisco Unity server completely, and back up the Exchange servers that are home servers for Cisco Unity subscribers. See the [“Backing Up Messages and Other Data”](#) section on page 14-8.
9. Write down the existing Cisco Unity data that will not be exported or cannot be imported. See the [“How the Cisco Unity Database Export Utility Handles Data”](#) section on page 14-9.
10. Install the Cisco Unity Database Export utility, and Export Cisco Unity data. See the [“Installing and Running the Cisco Unity Database Export Utility”](#) section on page 14-12.
11. *Only for the Unified Messaging configuration with subscribers homed in Exchange on a server other than the Cisco Unity server:* Uninstall Cisco Unity 2.x. See the [“Uninstalling Cisco Unity Version 2.x”](#) section on page 14-13.

**Caution**

You must uninstall Cisco Unity to remove Cisco Unity properties from Exchange users throughout the Exchange site. Otherwise, you will have to manually remove Cisco Unity properties from each Exchange user in raw mode before you can create subscriber accounts on the upgraded Cisco Unity server by importing mail users into Exchange.

12. Remove the system key from the Cisco Unity server.
13. Install and configure the Cisco Unity 4.0(3) server, depending on the Exchange version:

Exchange 2003 and Exchange 2000	In the “Part 1: Installing and Configuring the Cisco Unity Server” section on page 1-1, do Task 3. through Task 11.
Exchange 5.5	<ol style="list-style-type: none"> a. In the “Part 1: Installing and Configuring the Cisco Unity Server” section on page 1-1, do Task 3. through Task 6. b. Install Exchange 5.5 on the Cisco Unity server (supported only for the Voice Messaging configuration) or install the Exchange 5.5 administration software on the Cisco Unity server. See the “Installing Exchange 5.5 or Exchange 5.5 Administration Software” section on page 14-15. c. In the “Part 1: Installing and Configuring the Cisco Unity Server” section on page 1-1, do Task 8. through Task 11.

**Caution**

After you install Cisco Unity software, do not add any objects (such as subscribers and distribution lists) or remove any default objects until after you import data from the existing Cisco Unity system. The Cisco Unity Database Import utility requires that data be imported into a clean Cisco Unity system.

**Caution**

If you plan to change the phone system integration (for example, by changing from a circuit-switched phone system to Cisco CallManager), do not make any changes until you set up the integration. If you change the integration too soon, subscriber and call handler settings will not match integration settings, and transfers will fail.

14. Import Windows NT/Active Directory accounts into Exchange 5.5, if applicable. See the “[Importing Windows NT/Active Directory Accounts into Exchange 5.5 \(Selected Configurations Only\)](#)” section on page 14-18.
15. Install the Cisco Unity Database Import utility, and import data exported from the Cisco Unity 2.x system. See the “[Installing and Running the Cisco Unity Database Import Utility](#)” section on page 14-19.
16. Review the consistency of the imported database. See the “[Reviewing the Consistency of the Cisco Unity 4.0 Database](#)” section on page 14-21.
17. If you want to restore messages and other Exchange data, use the backup you created in Task 8. This task is not necessary if the Cisco Unity 2.x system was installed in the Unified Messaging configuration, because you moved Exchange accounts (if any) to other Exchange servers in Task 7.
18. Manually re-enter custom data. See the “[Re-entering Custom Data](#)” section on page 14-21.
19. Back up the Cisco Unity server. Refer to *White Paper: Backing Up and Restoring a Cisco Unity System (Version 4.0)* at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/whitpapr/backup40.htm.

Verifying System Requirements

Refer to *Cisco Unity 4.0 System Requirements, and Supported Hardware and Software* at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/sysreq/40_sysrq.htm to confirm that the hardware and software that you intend to use for the 4.0 system is supported.

Some hardware, software, configurations, and Cisco Unity versions are no longer supported. In particular, note the following:

Some servers and voice cards that were supported for Cisco Unity 2.x are not supported with Cisco Unity 4.0. If the Cisco Unity server contains cards that are not supported with version 4.0, the cards must be replaced before you upgrade because Cisco Unity 4.0 will not run with unsupported cards.

Fax cards on the Cisco Unity server and ActiveFax are not supported. You must remove fax cards before you begin the upgrade. ActiveFax, the fax server available with previous versions of Cisco Unity, is no longer supported, either on the Cisco Unity server or on a separate fax server.

Windows NT is not supported on the Cisco Unity server. The Cisco Unity server can be added to a Windows NT domain, but the operating system on the Cisco Unity server must be Windows 2000 Server.

Exchange is not supported on the Cisco Unity server for Unified Messaging. If Cisco Unity is configured for Unified Messaging, Exchange cannot be installed on the Cisco Unity server for Cisco Unity 4.0. You must either move Exchange mailboxes to other Exchange servers or, if there are no other Exchange servers, you must install Exchange on another server and move Exchange mailboxes to the new server. If Cisco Unity is configured for Voice Messaging, Exchange 5.5 is supported on a Cisco Unity 4.0 server only if you are upgrading from a previous version of Cisco Unity. (Exchange 2000 is still supported on the Cisco Unity server both for upgrades and for new installations.)

Upgrades from Cisco Unity versions earlier than 2.3(4.104) are not supported. The Cisco Unity Database Export and Database Import utilities, which let you export subscriber and other information from a 2.x system and import it into a 4.0(x) system, do not work on a Cisco Unity system earlier than version 2.3(4.104). You must install Cisco Unity 4.0(x) as a new system, and all Cisco Unity data from the old system is lost.

Cisco Unity license files replace the system key. For more information on license files, see the “[Obtaining Cisco Unity License Files](#)” section on page 2-1.

Duration of the Upgrade

The amount of time required to upgrade from Cisco Unity version 2.x to 4.0 depends on a number of variables. The following list is a very broad estimate of the duration of an upgrade:

Moving Exchange mailboxes from the Cisco Unity server (only if the Cisco Unity server is configured for Unified Messaging)	Depends on the size of the Exchange database and the speed of the network connection. May be several hours.
Backing up messages on the Cisco Unity server (only if the Cisco Unity server is configured for Voice Messaging)	Depends on the size of the Exchange database and the speed of the network connection. May be several hours.
Installing the operating system and other third-party software	About 6 hours, depending on complexity of installation.
Exporting data from Cisco Unity 2.x, uninstalling Cisco Unity 2.x, and importing data into Cisco Unity 4.0	See duration data in Table 14-1 on page 14-6 .
Reintegrating the upgraded Cisco Unity server with the phone system	About 2 hours.
Testing	About 2 hours.

Data from Duration Tests

To test the duration of exporting data, uninstalling Cisco Unity 2.x, and importing data into Cisco Unity 4.0, we upgraded from Cisco Unity 2.4(6) on a server with an Intel Pentium II 450-MHz processor, 512 MB of RAM, and no other system activity.

The duration of these tasks will vary depending on the speed of the processor and the amount of RAM in the Cisco Unity server. In addition, for Unified Messaging configurations in which Cisco Unity subscribers are homed on other Exchange servers, the duration will vary depending on the speed of the network.

We used three databases for our tests:

- Database 1** 1,150 objects: 500 mail users, 100 call handlers, other default and random objects.
- Database 2** 3,300 objects: 1,500 mail users, 250 call handlers, other default and random objects.
- Database 3** 5,300 objects: 2,500 mail users, 250 call handlers, other default and random objects.

(The number of objects on your system appears in the Cisco Unity Database Export utility before you run the export.)

All mail users had three greetings and a recorded name, and all call handlers had three greetings. [Table 14-1](#) lists the resulting duration data.

Table 14-1 Duration Data

Database	Duration of Export and Size of Exported Database	Duration of Uninstallation ¹	Duration of Import
1	12 min. 121 MB	20 min.	Exchange 2000: 1 hr. 27 min. Exchange 5.5: 49 min.
2	28 min. 352 MB	1 hr. 3 min.	Exchange 2000: 4 hr. 50 min. Exchange 5.5: 2 hr. 44 min.
3	60 min. 558 MB	1 hr. 29 min.	Exchange 2000: 9 hr. 32 min. Exchange 5.5: 7 hr. 0 min.

1. Uninstallation is necessary only if the Cisco Unity server was configured as Unified Messaging and any Cisco Unity subscribers are homed in Exchange on a server other than the Cisco Unity server.

Reviewing the Consistency of the Cisco Unity 2.x Database

The Cisco Unity version 4.0(3) installation disc includes the Cisco Unity Directory Walker utility for Cisco Unity version 2.x. This utility finds and fixes invalid links, and incorrect and stranded objects in the Exchange directory. Run the utility to fix any errors before exporting data. For a detailed list of the checks that Directory Walker performs, refer to Directory Walker Help.

The Directory Walker utility creates a log file that contains a list of invalid references. In addition, the utility includes options to automatically remove call handlers that are not associated with a subscriber (orphaned call handlers) and to remove Cisco Unity properties from Exchange mail users who do not have a primary call handler.

Do the following two procedures in the order listed.

To Install the Cisco Unity Directory Walker Utility

-
- Step 1** On Cisco Unity DVD 1 or CD 1, or from the location to which you saved the downloaded Cisco Unity CD 1 image files, browse to the directory **Utilities\DbWalker2x\Setup**, and double-click **Setup.exe**.
- Step 2** Follow the on-screen prompts.
-

To Run the Cisco Unity Directory Walker Utility

-
- Step 1** Log on to Windows by using the Cisco Unity installation account.
- Step 2** Confirm that Cisco Unity is running.
- Step 3** Browse to the directory **CommServer\Utilities\dbWalker2x**, and double-click **DbWalker.exe**.
- Step 4** Uncheck the **Remove Orphaned Call Handlers Automatically** check box and the **Remove Subscriber Properties on Mail Users That Have No Primary Call Handlers** check box. This produces a report so you can correct errors before you delete orphaned call handlers and subscriber properties.
- Step 5** Specify a name and location for the Directory Walker log file.
- Step 6** Click **Walk Database**.

- Step 7** When Directory Walker has finished, review the log file that you specified in [Step 5](#). To find problems, search for the string (**error**). Each error listed in the log includes detailed information so you can correct it.
- Step 8** When you have corrected the errors that Directory Walker reported, repeat [Steps 3](#) through [7](#) until the only errors in the log file are orphaned call handlers and mail users that have no primary call handlers. (If you have no such errors, you are finished with this procedure.)
- Step 9** Run the Directory Walker utility one more time. Browse to the directory **TechTools**, and double-click **DbWalker.exe**.
- Step 10** This time, check the **Remove Orphaned Call Handlers Automatically** check box and the **Remove Subscriber Properties on Mail Users That Have No Primary Call Handlers** check box.
- Step 11** Specify a name and location for the Directory Walker log file.
- Step 12** Click **Walk Database**.
- Step 13** When Directory Walker has finished, search the log file for the string (**error**) to find which orphaned call handlers were removed and which mail users had their Cisco Unity subscriber properties removed.
- Step 14** Copy the log file to a network drive or to a high-capacity removable storage device. If you encounter problems with the upgrade process, Cisco TAC requires this file for troubleshooting.
-

Moving Mailboxes From Exchange 5.5 on the Cisco Unity Server to Exchange 5.5 on a Separate Server

For Unified Messaging, Cisco Unity 4.0 does not support Exchange installed on the Cisco Unity server. If Cisco Unity is configured for Unified Messaging and if Exchange 5.5 mailboxes are homed on the Cisco Unity server, you must move the Exchange mailboxes to another Exchange server before you reinstall software on the Cisco Unity server.

Do the following two procedures in the order listed.

To Move Exchange 5.5 Mailboxes

- Step 1** Stop Cisco Unity.
- Step 2** On the Windows Start menu, click **Programs > Microsoft Exchange > Microsoft Exchange Administrator**.
- Step 3** In the tree in the left pane, click **Recipients**, and click the name(s) of the subscriber(s) in the right pane.
- Step 4** Click **Tools > Move Mailbox**.
- Step 5** In the Move Mailbox To list, click the server to which the mailbox(es) will be moved.
- Step 6** Click **OK** to move the mailbox(es).

**Caution**

Exchange 5.5 does not provide a progress indicator to indicate when all of the mailboxes have been moved. Ensure that all mailboxes have been moved before you continue, or the Exchange database may be corrupted. If the database is large or the network connection is slow, moving all mailboxes may take several hours.

If you have moved more than 100 mailboxes in Exchange 5.5, run Exchange Optimizer on the new Exchange server. Otherwise, you may encounter problems with Cisco Unity not accepting dialed extensions for subscribers and call handlers, and with conversation-related errors in the event log.

To Run Exchange Optimizer

- Step 1** On the Windows Start menu, click **Programs > Microsoft Exchange > Microsoft Exchange Optimizer**.
- Step 2** Follow the on-screen instructions.

Backing Up Messages and Other Data

The Cisco Unity Database Export utility does not back up messages, which are stored in Exchange. Back up the Cisco Unity server completely by using Backup Exec or another Exchange-aware backup utility. In addition, if you are upgrading a Cisco Unity system that was installed in the Unified Messaging configuration, back up the Exchange servers on which subscribers are homed.

**Caution**

The Cisco Unity Database Export utility does not back up messages or other Exchange-specific data. You must back up by using an Exchange-aware backup utility.

You can also back up messages by using ExMerge, which is available on the Exchange 2000 compact disc.

**Note**

If you are upgrading from Exchange 5.5 to Exchange 2000 at the same time that you are upgrading Cisco Unity in the Voice Messaging configuration, and if subscribers will still be homed on the Cisco Unity server after the upgrade, back up messages by using the version of ExMerge on the Exchange 2000 CD. Other Exchange-aware backup utilities cannot restore Exchange 5.5 messages to Exchange 2000.

Note that an ExMerge backup of the message database may be much larger than the message database itself because ExMerge backs up each Exchange mailbox separately. This affects how messages that are sent to groups (distribution lists) are backed up.

When someone sends a message to a group, that message appears in the Exchange database only once. Therefore, a 1-MB voice message that was sent to a distribution list of 20 people occupies only 1 MB in the Exchange database (and 1 MB in a Backup Exec backup of that database). However, when you back up the Exchange message database by using ExMerge, the entire 1-MB voice message is included in the backup of the mailbox for each subscriber who received the message. Therefore, the backup tape

contains 20 MB for that voice message instead of just 1 MB. In addition, when you restore the messages, the restored database will include all 20 copies of the voice message rather than the one copy that appeared in the original database.

**Caution**

If you use ExMerge to back up Exchange messages, the only way to determine how large the backup will be is to perform the backup. The backup may not fit onto the backup medium. In addition, when you restore Exchange messages onto the Cisco Unity server, the restored database may require significantly more disk space than the original database, and it may not fit in the available hard disk space.

How the Cisco Unity Database Export Utility Handles Data

The Cisco Unity Database Export utility exports subscriber and system information from Cisco Unity 2.x systems so the data can be imported into Cisco Unity 4.0.

**Caution**

Upgrading to Cisco Unity 4.0 requires that you completely remove the previous version of Cisco Unity and then install the new version. If you do not export Cisco Unity data, you will have to recreate subscriber accounts, call handlers, and other objects and properties.

Data is exported to a Microsoft Access database. The size of the database depends on the number and size of objects and properties in the Cisco Unity 2.x database. (For example, exporting all objects and properties on a system with 1,500 subscribers, 2,000 call handlers, and short greetings for 700 of the call handlers generated a 300-MB database.)

Most of the Cisco Unity data stored on the Cisco Unity server and in Exchange is exported by the Cisco Unity Database Export utility and can be imported into Cisco Unity 4.0 with the Cisco Unity Database Import utility. The following sections detail how data is handled.

Data That Is Exported

Table 14-2 Data Exported by the Cisco Unity Database Export Utility

Data	Qualifications
Subscriber information	<p>Exported, except for the following values on each subscriber account:</p> <ul style="list-style-type: none"> • Phone password. • Last password change date/time. • Account lockout status. • Last contact time stamp. • SMTP address, unless the user is an Internet subscriber. This value is generated automatically when you import subscribers into Cisco Unity 4.0. • Home server. This value is assigned automatically when you import subscribers into Cisco Unity 4.0. <p>New users are homed on the Cisco Unity server, or—if Exchange is not installed on the Cisco Unity server—the user is created on the Exchange server to which Cisco Unity is connected.</p>

Table 14-2 Data Exported by the Cisco Unity Database Export Utility (continued)

Data	Qualifications
Subscriber templates	Templates are exported except for the public distribution lists that were associated with the templates. Public distribution lists will need to be manually readded to subscriber templates on the Cisco Unity 4.0 system.
Call handlers	Exported.
Interview handlers	Exported.
Class of service information	Exported.
Restriction tables	Exported.
Location objects	The primary location object is exported but not imported. Secondary (delivery) location objects are exported and imported. All subscribers added to the Cisco Unity 4.0 system will be associated with the primary location object created by the Cisco Unity 4.0 Setup program. No subscribers will be associated with any other location object. The other location objects imported will be used for blind addressing only.
Name lookup handler	Exported.
Password policy settings	Exported.
Port configuration information	All the port capability settings information (such as answer, dial, TRAP, and out of service), the phone system with which the port is associated (for dual phone system configurations), the extension number associated with the port, and the MWI capability flag in the registry are exported.

Data That Is Not Exported, and Data That Is Exported but Not Imported

Exchange Messages



Caution

Exchange messages are not exported by the Cisco Unity Database Export utility. If you do not back up messages as discussed in the [“Backing Up Messages and Other Data”](#) section on page 14-8, you will not be able to restore them on the Cisco Unity 4.0 system.

Phone System Settings

To restore the current phone system settings, you need to follow the procedures in the Cisco Unity integration guide for your phone system, later in the upgrade process.

Primary Location Object

The primary location object is exported but not imported. After upgrading, you need to re-record the voice name, and re-enter values for Dial ID and Display Name on the Primary Location page in the Cisco Unity Administrator (**Network > Primary Location**).

System Prompts

Customized system prompts are not supported. All system prompts are automatically deleted and replaced whenever you upgrade Cisco Unity.

Settings on the Configuration Pages in the Cisco Unity Administrator

You may want to write down settings on the Configuration pages in the Cisco Unity Administrator, including site name, file aging settings, RSA SecurID security settings, contact information, recording options, and languages loaded.



Caution

If you do not install and load the same phone languages on the Cisco Unity 4.0 system as were installed and loaded on the 2.x system, subscribers who are configured to use the missing languages will not be able to hear the system conversation in their languages.

Schedules and Holidays

Schedules and holidays are exported, but they cannot be imported. Write down the settings so you can reproduce them in Cisco Unity 4.0.

Public Distribution Lists

Public distribution lists (PDLs) are not exported, but because list members are stored in Exchange, PDLs are preserved when Cisco Unity is installed in the Unified Messaging configuration and connected with Exchange on a separate server.

When PDLs will not be preserved, you can export them from Exchange 5.5 to a CSV file. After you upgrade to Cisco Unity 4.0, you recreate them by importing the CSV data using the Cisco Unity Public Distribution List Builder utility. For information on exporting PDLs from Exchange 5.5, refer to Exchange 5.5 Help.

Call Routing Rules

Call routing rules are exported, but they cannot be imported, and you cannot easily read the routing-rules file that is saved in the CommServer\BackupData directory. The information is exported for the benefit of technicians.

If you added any call routing rules to Cisco Unity 2.x, write down the settings for those rules so you can reproduce them in Cisco Unity 4.0. (The default routing rules can be changed only with the help of Cisco TAC, so you generally should not have to write down the settings for those rules.)

To Write Down the Settings for Customized Call Routing Rules

-
- Step 1** In the Cisco Unity Administrator, go to **Call Management > Call Routing > Direct Calls**.
 - Step 2** In the Routing Table, click each customized routing rule and write down the settings for that rule.
 - Step 3** Go to **Call Management > Call Routing > Forwarded Calls**.
 - Step 4** In the Routing Table, click each customized routing rule and write down the settings for that rule.
-

Phone System Files and Windows Registry Keys

Many Cisco Unity-related Windows registry keys and attributes in the Cisco Unity phone system files can be customized. Some of these customizable attributes are no longer relevant for Cisco Unity 4.0—and some may even cause problems—so changes to the registry and phone system files are exported but cannot be imported.

After you run the Cisco Unity Database Import utility, you can find the settings from the Cisco Unity 2.x server on the Cisco Unity 4.0 server in the directory `CommServer\BackupData`. The directory will contain:

- The phone system file currently active on the Cisco Unity 2.x system.
- All phone system files in the `Intlib` directory that have an `.avd` extension: `Avsmdi.avd`, `Avanalog.avd`, `Averic.avd`, `Avfuji.avd`, `Avdcs.avd`, `Avhcx.avd`, `Avmci.avd`, and `Avtosh.avd`.
- The entire ActiveVoice tree in the Windows registry. The tree is saved in a file named `RegistryTree.old`.

Installing and Running the Cisco Unity Database Export Utility

Do the following two procedures in the order listed.

To Install the Cisco Unity Database Export Utility

-
- Step 1** Copy the **FullDBExport3x.exe** file that you downloaded from `CiscoUnityTools.com` to the Cisco Unity server.
 - Step 2** Extract the files to a temporary directory on the Cisco Unity server.
 - Step 3** Browse to the directory to which you extracted the files, and run **Setup.exe**.
 - Step 4** Follow the on-screen prompts to install the Cisco Unity Database Export utility on the Cisco Unity server.
 - Step 5** Delete the download file and the extracted files to save disk space.
 - Step 6** If you are prompted, restart the server.
-

To Run the Cisco Unity Database Export Utility

-
- Step 1** Log on to Windows by using the Cisco Unity installation account.
 - Step 2** Confirm that the location to which you are exporting has enough space for the export database. See the [“How the Cisco Unity Database Export Utility Handles Data”](#) section on page 14-9. Without enough space, the export will fail and you will have to run the export again.
 - Step 3** Exit the Cisco Unity software. (The utility will exit Cisco Unity automatically before it begins exporting data, if the software is still running.)
 - Step 4** On the Windows Start menu, click **Programs > Unity > Database Export**.
 - Step 5** Specify which information to include in the database. For each property that you exclude, the export and import processes will be faster and the database will be smaller.



Caution We strongly recommend that if you choose to exclude properties from the export, that subscriber greetings and recorded names be the only properties that you choose not to export.

If you exclude subscriber greetings and recorded names, you can set the Cisco Unity 4.0 system to play the first-time enrollment conversation for all subscribers when you import the database. The conversation prompts subscribers to record a greeting and name if none exist.

- Step 6** Specify the names and locations for the database file (which contains all the data listed in the “[Data That Is Exported](#)” section on page 14-9) and the log file (which logs the progress of the export and which Cisco TAC requires for any troubleshooting).
- Step 7** Click **Export Data**. If necessary, you can click **Exit** to interrupt the export before it finishes.
- Step 8** When the export finishes, a dialog box displays the number of errors that the export encountered. If there are any errors, display the log file and search for the string (**error**) to find and review each error.
- Step 9** Copy the database and log files that you specified in [Step 6](#) from the Cisco Unity server to a network drive or to a high-capacity removable storage device.

Uninstalling Cisco Unity Version 2.x

Cisco Unity version 4.0 includes the Cisco Unity Uninstaller utility for uninstalling Cisco Unity version 2.x.

Uninstall Cisco Unity 2.x only if the Cisco Unity system is installed in the Unified Messaging configuration and any Cisco Unity subscribers are homed in Exchange on a server other than the Cisco Unity server.



Caution

If the Cisco Unity system is installed in the Unified Messaging configuration and any Cisco Unity subscribers are homed in Exchange on a server other than the Cisco Unity server, you must uninstall Cisco Unity to remove Cisco Unity properties from Exchange users throughout the Exchange site. Otherwise, you will have to manually remove Cisco Unity properties from each Exchange user in raw mode before you can create subscriber accounts on the upgraded Cisco Unity server by importing mail users into Exchange.

For detailed information on what the Uninstaller utility does, refer to the Uninstaller Help.

Option to Skip Removal of Exchange Objects

If you have manually removed the Unity folder from Exchange, reinstalled Exchange, or want the Cisco Unity Uninstaller utility to skip the removal of all Exchange objects, run the Uninstaller utility with the `/SkipDOH` command line option. The following items are retained:

- All Cisco Unity custom data for all mail users in the Exchange directory who are associated with the local Cisco Unity server.
- All Cisco Unity objects on the current Cisco Unity server in the existing Exchange directory.
- The Example Administrator, Example Subscriber, and Cisco Unity_<MachineName> accounts in the recipients container of the local Cisco Unity server.

The `/SkipDOH` command line option can be useful if you reinstalled Exchange but forgot to remove Cisco Unity first, and you want to clean up all the Cisco Unity-specific files on your hard disk and in the registry before installing a new version of Cisco Unity.

Installing and Running the Cisco Unity Uninstaller Utility

Do the following two procedures in the order listed.

To Install the Cisco Unity Uninstaller Utility

-
- Step 1** On Cisco Unity DVD 1 or CD 1, or from the location to which you saved the downloaded Cisco Unity CD 1 image files, browse to the directory **Utilities\UninstallUnity2x\Setup**, and double-click **Setup.exe**.
- Step 2** Follow the on-screen prompts.
- Step 3** Restart the server.
-

To Run the Cisco Unity Uninstaller Utility

-
- Step 1** If the Windows Program menu item for Cisco Unity was renamed from Unity, change the name back to Unity now, or menu items will not be removed during the uninstall.
- Step 2** Log on to Windows by using the Cisco Unity installation account.
- Step 3** On the Windows Start menu, click **Programs > Unity Uninstaller > Unity Uninstaller**.
- If the uninstall does not start and you get an error message that indicates the LDAP port is incorrect, the wrong LDAP port was specified in the Uninstaller utility. To determine which LDAP port the Cisco Unity server is using, in the Exchange Administrator, open the site container, open the Configuration container, click **Protocols**, and double-click **LDAP**. If necessary, you can change this value at the server level instead of the site level.
- Step 4** Follow the on-screen prompts to complete the Cisco Unity uninstall.
- If you are prompted to stop IIS and NNTP services, click **OK** to continue.
- In some cases, a dialog box may appear explaining that you will need to manually remove the Unity folder from Exchange. Note this so that you can remove the folder later.



Caution Do not interrupt the Cisco Unity Uninstaller utility. Depending on the number of subscribers and the speed of the Cisco Unity server, the utility may take an hour or more to complete. If you interrupt the uninstall program, you cannot restart it. You will need to call Cisco TAC for information on completing the uninstall manually. For more information on the duration of the uninstall, see the [“Duration of the Upgrade”](#) section on page 14-5.

- Step 5** If the dialog box on manually removing the Unity folder from Exchange did not appear in [Step 4](#), you are finished with the procedure.
- If the dialog box on manually removing the Unity folder from Exchange appeared in [Step 4](#), remove the folder now. Start the Exchange Administrator in raw mode:
- ```
<drive>:\Exchsrvr\bin\Admin.exe -r
```




---

**Caution** Delete the Unity folder from Exchange only if there are no other Cisco Unity servers on the site.

---

- Step 6** Select the Unity folder.
- Step 7** On the Exchange Administrator menu, click **Edit > Delete Raw Object**.
- Step 8** Confirm that you want to delete the folder.

**Step 9** Close the Exchange Administrator.

---

## Installing Exchange 5.5 or Exchange 5.5 Administration Software

Do the applicable procedures in the order listed, based on the Cisco Unity configuration:

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Voice Messaging</b>   | <p>Install Exchange 5.5 either on the Cisco Unity server or on a separate server. See the <a href="#">“Installing Exchange 5.5” section on page 14-15</a>.</p> <p>If you install Exchange 5.5 on a separate server, then install the Exchange 5.5 administration software on the Cisco Unity server. See the <a href="#">“Installing Exchange 5.5 Administration Software Only” section on page 14-17</a>.</p>                                                                                 |
| <b>Unified Messaging</b> | <p>If you do not already have an existing Exchange 5.5 site, install Exchange 5.5 on a separate server. (With the Unified Messaging configuration, installing Exchange on the Cisco Unity server is not supported.) See the <a href="#">“Installing Exchange 5.5” section on page 14-15</a>.</p> <p>Then install the Exchange 5.5 administration software on the Cisco Unity server. See the <a href="#">“Installing Exchange 5.5 Administration Software Only” section on page 14-17</a>.</p> |

## Installing Exchange 5.5

### To Install Exchange Server 5.5

---

- Step 1** If you are installing the Cisco Unity system into an existing Exchange site, log on to Windows by using the account that was used to install Exchange on other servers.
- Otherwise, use an account that has Services Account Administration permissions for the destination site and configuration containers.
- Step 2** Insert the Cisco Unity Message Store 5.5 CD in the CD-ROM drive.
- Step 3** When the Microsoft Exchange Server Version 5.5 Window appears, click **Setup Server and Components**.
- If the disc does not run automatically, browse to the root directory, and double-click **Launch.exe**.
- Step 4** Click **Microsoft Exchange Server 5.5**.
- Step 5** Accept the license agreement.
- Step 6** Click **Complete/Custom**.
- Step 7** Uncheck the **Outlook Web Access** check box.
- Optionally, you can save disk space by choosing not to install the MS Mail and/or cc:Mail connectors, if the site does not require them. In the list, click **Microsoft Exchange Server**, then click **Change Option**. Uncheck the **MS Mail Connector** or **cc:Mail Connector** check box. Then click **OK**.
- Step 8** Click **Continue**.

- Step 9** When you are prompted to enter a CD key, enter the key for Cisco Unity Message Store 5.5 from the sticker located on the CD sleeve.
- Step 10** Click **OK**.
- Step 11** Follow the on-screen prompts until you are prompted to choose between joining an existing site and creating a new site:

|                              |                                                                                                                                                                                              |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Join an existing site</b> | When there is an existing Exchange site and you want to add the Cisco Unity server to that site.                                                                                             |
| <b>Create a new site</b>     | When the Cisco Unity server is the only Exchange server.<br>or<br>When there are other Exchange servers, but you are installing the Cisco Unity system in the Voice Messaging configuration. |

- Step 12** Follow the on-screen prompts until you are prompted to run the optimizer.
- Step 13** Click **Run Optimizer**. Note that the Exchange Optimizer may automatically move files to different hard disks unless you specify otherwise.
- Step 14** Follow the on-screen prompts to complete the installation.
- Step 15** At the Microsoft Exchange Server screen, click **Exit**.
- Step 16** When the installation is complete, restart the server.

**Note**

Do the following procedure, “[To Change the LDAP Port Number](#),” if both Exchange 5.5 and Active Directory are installed on the partner Exchange server. Otherwise, changing the LDAP port number is optional. (By default, Active Directory on a domain controller uses port 389. Exchange 5.5 uses Lightweight Directory Access Protocol (LDAP), whose default port is also 389.)

**To Change the LDAP Port Number**

- Step 1** On the Windows Start menu, click **Programs > Microsoft Exchange > Microsoft Exchange Administrator**.
- Step 2** In the site container, open the **Configuration** container.
- Step 3** Under Configuration, click **Protocols**.
- Step 4** In the right pane, double-click **LDAP (Directory) Site Defaults**.
- Step 5** On the General tab, change Port Number to **379** (or another available port number).
- Step 6** Click **OK**, and close the Exchange Administrator.

Microsoft recommends that all Exchange 5.5 servers on the network have the same service pack installed. Do the following procedure on all Exchange 5.5 servers in the site, including the Cisco Unity server if you installed Exchange 5.5.

---

**To Install Exchange 5.5 Service Pack 4**

- Step 1** Insert Cisco Unity Service Packs CD 3 in the CD-ROM drive.
  - Step 2** Browse to the directory **Exchange55\_SP4**, and double-click **Update.exe**.
  - Step 3** Follow the on-screen prompts to complete the installation.
  - Step 4** Restart the server.
- 

**To Configure Exchange**

- Step 1** On the Windows Start menu, click **Programs > Microsoft Exchange > Microsoft Exchange Administrator**.
  - Step 2** In the dialog box that appears, click **Browse**.
  - Step 3** In the Server Browser dialog box, click the name of the Cisco Unity server, and click **OK**.
  - Step 4** In the Connect to Server dialog box, click **Set as Default**, and click **OK**.
  - Step 5** If you changed the LDAP port number, restart the server.
- 

## Installing Exchange 5.5 Administration Software Only

Do the following two procedures in the order listed.

**To Install Exchange 5.5 Administration Software Only**

- Step 1** On the Cisco Unity server, insert the Cisco Unity Message Store 5.5 CD in the CD-ROM drive. If the disc does not run automatically, browse to the root directory, and double-click **Launch.exe**.
  - Step 2** When the Microsoft Exchange Server Version 5.5 window appears, click **Setup Server and Components**.
  - Step 3** Click **Microsoft Exchange Server 5.5**.
  - Step 4** Accept the license agreement.
  - Step 5** Click **Complete/Custom**.
  - Step 6** Uncheck all check boxes except the **Microsoft Exchange Administrator** check box.
  - Step 7** Click **Continue**.
  - Step 8** When you are prompted to enter a CD key, enter the key for Cisco Unity Message Store 5.5 from the sticker located on the CD sleeve.
  - Step 9** Click **OK**.
  - Step 10** Follow the on-screen prompts to complete the installation.
-

Microsoft recommends that all Exchange 5.5 servers on the network have the same service pack installed. Do the following procedure on the Cisco Unity server and on the other Exchange 5.5 servers in the site, if you have not already installed Service Pack 4.

#### To Install Exchange 5.5 Service Pack 4

- 
- Step 1** Insert Cisco Unity Service Packs CD 3 in the CD-ROM drive.
  - Step 2** Browse to the directory **Exchange55\_SP4**, and double-click **Update.exe**.
  - Step 3** Follow the on-screen prompts to complete the installation.
  - Step 4** Restart the server.
- 

## Importing Windows NT/Active Directory Accounts into Exchange 5.5 (Selected Configurations Only)

If the Cisco Unity 4.0 system is using Exchange 5.5, you may have to import Windows NT/Active Directory accounts into Exchange before you import Cisco Unity data into Exchange.

When you exported data from the Cisco Unity 2.x system by using the Database Export utility, the utility exported the Exchange alias for every subscriber. When you import data back into Cisco Unity 4.0, the Database Import utility will look in Exchange for subscribers by alias. If an alias does not exist in Exchange but does exist in Windows NT/Active Directory, the import process will not import that subscriber. Therefore, if the aliases that you exported from Cisco Unity 2.x still exist in Windows NT/Active Directory but do not exist in Exchange, you need to import the Windows NT/Active Directory accounts into Exchange 5.5 before you can use the Database Import utility to import data back into Cisco Unity.

#### To Import Windows NT/Active Directory Accounts into Exchange 5.5

- 
- Step 1** On the Windows Start menu, click **Programs > Exchange > Microsoft Exchange Administrator**.
  - Step 2** In the Exchange Administrator, click **Tools > Extract Windows NT Account List**.
  - Step 3** Click the domain and domain controller where Windows NT/Active Directory accounts are stored.
  - Step 4** Click **Browse**, and specify the name and location of the output file. The file will be stored in CSV format.
  - Step 5** Click **OK** twice to finish extracting accounts from Windows NT or Active Directory.
  - Step 6** Click **Tools > Directory Import**.
  - Step 7** Click **Import File**, and browse to the file you named in [Step 4](#).
  - Step 8** If the organization does not use the default recipients container, change the container. Consult the Information Systems administrator for the correct container.  
Do not change any other settings.
  - Step 9** Click **Import**.
-

# Installing and Running the Cisco Unity Database Import Utility

After software on the Cisco Unity 4.0 server is fully installed and Cisco Unity is integrated with the phone system, use the Cisco Unity Database Import utility to import the data you exported earlier. For information on how long importing data will take, see the “[Duration of the Upgrade](#)” section on [page 14-5](#).

The Cisco Unity Database Import utility requires that data be imported into a clean Cisco Unity system.

## The Import Process

The Database Import utility imports subscribers into Exchange based on Exchange aliases. (If the site upgraded from Exchange 5.5 to Exchange 2000, which causes the Exchange distinguished name to change even if the container structure remains the same, the alias is the only piece of data about each Cisco Unity subscriber that will be the same.) In rare cases, this may cause problems because Exchange does not require the alias to be unique, although it is highly recommended. If more than one match for an alias is found, the Cisco Unity subscriber will not be imported.

If you create a new Exchange directory and manually create users, be certain that aliases in the new directory match those in the old directory. If aliases do not match, the Database Import utility will look up a subscriber, not find that person, and then create a new Exchange account by using the old alias. Each subscriber for which this occurs will have two Exchange accounts.

## Importing Cisco Unity 2.x Data into Cisco Unity 4.0(3)

Do the following four procedures in the order listed.



### Caution

You must use the version of the Database Import utility that you downloaded from CiscoUnityTools.com in [Task 3](#) of the “[Task List for Upgrading a Cisco Unity 2.x System to Version 4.0\(3\)](#)” section on [page 14-1](#). Only this version of the utility is compatible with Cisco Unity 4.0(3). Earlier versions of the utility, including the one currently on the Cisco Unity 4.0(3) CDs, can import data only into Cisco Unity 4.0(2) and earlier.

### To Install the Cisco Unity Database Import Utility

- Step 1** Copy the **FullDBImport4x.exe** file that you downloaded from CiscoUnityTools.com to the Cisco Unity server.
- Step 2** Extract the files to a temporary directory on the Cisco Unity server.
- Step 3** Browse to the directory to which you extracted the files, and run **Setup.exe**.
- Step 4** Follow the on-screen prompts to install the Cisco Unity Database Import utility on the Cisco Unity server.
- Step 5** Delete the download file and the extracted files to save disk space.

### To Run the Cisco Unity Database Import Utility

---

- Step 1** Log on to Windows by using the Cisco Unity installation account.
- Step 2** Note and write down the current maximum size of the paging file (virtual memory) on the Cisco Unity server.
- Step 3** Increase the maximum size of the paging file on the Cisco Unity server to 2 GB (2,000 MB).
- Step 4** On the Windows Start menu, click **Programs > Unity > Database Import - Unity 4.0(3) or 4.0(4)**.
- Step 5** Follow the on-screen prompts. For information on Database Import utility options, see the utility Help file, which appears in the same directory where you installed the utility.

Note the following:

- The Cisco Unity Database Import utility allows imports only into newly installed systems. If you try to import into a system to which you have added Cisco Unity subscribers or call handlers, the import will terminate with an error message.
- After subscriber information is imported, subscribers are homed on the same Exchange server that they were homed on before you exported them by using the Cisco Unity Database Export utility. If a subscriber in the database is not found in Exchange, the Database Import utility will create a new Exchange account on the Cisco Unity server. If Exchange is not installed on the Cisco Unity server, the account will be created on the partner Exchange server.

For information on moving subscribers between Exchange servers, refer to the “Moving Subscriber Mailboxes” section in the “Cisco Unity Data and Log Files” chapter of the *Cisco Unity Maintenance Guide, Release 4.0(3)* at

[http://www.cisco.com/univercd/cc/td/doc/product/voice/c\\_unity/unity40/maint/maint403/ex/index.htm](http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/unity40/maint/maint403/ex/index.htm).

- Step 6** Reset the maximum size of the paging file on the Cisco Unity server to the value you noted and wrote down in Step 2.
- 

### To Review the Error Log for Errors

---

- Step 1** Open the error log file (the default is DBImport.log).
- Step 2** Search for the string (**error**).
- Step 3** If you find any instances of the string (**error**), determine the cause. Error descriptions are detailed. Note the following:
- On the same line as the string (**error**) is an explanation of what caused the error (for example, **Menu entry destination link not found in target directory**). The lines immediately before the string (**error**), up to the previous appearance of the string **\*\*Starting record\*\***, identify the object and, if applicable, the part of the object (for example, the name of the call handler and the specific menu option that caused the error).
  - If you cannot tell from the name of the object what type of object it is, search backward again for the previous appearance of the string **Importing**. This line indicates the type of object (for example, **Importing Call Handlers, first pass**).
  - The Database Import utility passes through the database twice, once to create objects and a second time to create the links between them. As a result, errors for one object may appear in two different places in the error log.

- Step 4** Fix the error as appropriate. If necessary, contact Cisco TAC for assistance.
- 

#### To Run Exchange Optimizer (Exchange 5.5 Only)

---

- Step 1** On the Windows Start menu, click **Programs > Microsoft Exchange > Microsoft Exchange Optimizer**.
- Step 2** Follow the on-screen prompts.
- 

## Reviewing the Consistency of the Cisco Unity 4.0 Database

#### To Run the Cisco Unity 4.0 Directory Walker Utility

---

- Step 1** Log on to Windows by using the Cisco Unity installation account.
- Step 2** Confirm that Cisco Unity is running.
- Step 3** On the Windows desktop, double-click the **Cisco Unity Tools Depot** icon.
- Step 4** In the left pane of Tools Depot, expand **Diagnostic Tools**.
- Step 5** Double-click **DBWalker**. (You can also click **DBWalker** to view online Help.)
- Step 6** Specify a name and location for the Directory Walker log file.
- Step 7** Click **Walk Database**.
- Step 8** When Directory Walker has finished, review the log file that you specified in [Step 6](#). To find problems, search for the string (**error**). Each error listed in the log includes detailed information on the error and how to correct it. Follow the instructions to correct all errors. For more information, see Directory Walker Help.
- 

## Re-entering Custom Data

### Deleting Unneeded Cisco Unity Subscribers

In some cases, after you upgrade to Cisco Unity 4.0, two Cisco Unity subscribers become associated with the same Active Directory account. As a result, each time someone logs on to Windows by using that Active Directory account and then tries to access the Cisco Unity Administrator, a page appears asking which Cisco Unity subscriber to log on as. If you encounter the problem, do the following procedure to delete unneeded Cisco Unity subscribers.

#### To Delete Unneeded Cisco Unity Subscribers

---

- Step 1** Access the Cisco Unity Administrator.

A page appears that reads: “Your Windows Domain Account [<Domain name>\<Active Directory account name>] is associated with multiple Cisco Unity subscribers.” The list on this page includes all of the Cisco Unity subscribers that are associated with the Active Directory account that you used to log on to Windows.

**Step 2** Write down the names of the Cisco Unity subscribers you want to delete.



**Caution** Do not delete the Unity Installer - <Servername> account.

**Step 3** Click **Unity Installer - <Servername>**, and click **Log In**.

**Step 4** Go to the Subscriber pages, and delete the subscribers whose names you wrote down in [Step 2](#).

**Step 5** Run the Directory Walker utility to determine whether deleting the subscribers introduced any inconsistencies into the database. See the procedure “[To Run the Cisco Unity Directory Walker Utility](#)” in the “[Reviewing the Consistency of the Cisco Unity 2.x Database](#)” section on page 14-6.

**Step 6** Correct inconsistencies found by Directory Walker, if any.

## Resetting Custom Settings

As noted in the “[Phone System Settings](#)” section on page 14-10, the “[Call Routing Rules](#)” section on page 14-11, and the “[Phone System Files and Windows Registry Keys](#)” section on page 14-11, some settings from the Cisco Unity 2.x system were not automatically imported into the Cisco Unity 4.0 system. You may want to:

- Selectively reapply changes to the Windows 2000 registry or to phone system files. (If you do not have a current backup of the registry, start Regedit, click **Registry > Export Registry File**, and save the registry settings to a file.)



### Caution

Changing the wrong registry key or entering an incorrect value can cause the server to malfunction. Before you edit the registry, confirm that you know how to restore it if a problem occurs. (Refer to the “Restoring” topics in Registry Editor Help.) Note that for Cisco Unity failover, registry changes on one Cisco Unity server must be made manually on the other Cisco Unity server, because registry changes are not replicated. If you have any questions about changing registry key settings, contact Cisco TAC.

- Rerecord the voice name for the primary location object, and re-enter values for Dial ID and Display Name on the Primary Location page in the Cisco Unity Administrator (**Network > Primary Location**).
- Re-enter settings on the Cisco Unity Administrator Configuration pages.
- Recreate routing rules.
- Re-enter holidays manually, if you upgraded a Cisco Unity system earlier than version 2.4.

## Recreating Public Distribution Lists

If you exported public distribution lists to a CSV file, you can now recreate them by importing the CSV data using the Public Distribution List Builder utility.

---

**To Recreate Public Distribution Lists by Using the Public Distribution List Builder Utility**

---

- Step 1** On the Windows desktop, double-click the **Cisco Unity Tools Depot** icon.
- Step 2** In the left pane of Tools Depot, expand **Administrative Tools**.
- Step 3** To display online Help for the utility, click **Public Distribution List Builder**.  
To run the utility, double-click **Public Distribution List Builder**.
-

