Managing Mailbox Stores in Cisco Unity Connection 8.x

See the following sections:

How Multiple Mailbox Stores Work in Cisco Unity Connection 8.x

During installation, Cisco Unity Connection automatically creates:

- A directory database for system configuration information (user data, templates, classes of service, and so on).
- A mailbox store database for information on voice messages (who each message was sent to, when it was sent, the location of the WAV file on the hard disk, and so on).
- An operating-system directory for voice message WAV files.

An administrator with the required permissions can create up to four additional mailbox stores. Each additional mailbox store includes:

- Another mailbox-store database for information on voice messages that are saved in that mailbox store. The database is presized for an average of approximately 40 messages each for 10,000 users, or about 1.25 GB. (The database application currently being used for Connection cannot dynamically resize a database after it is created.)
- Another operating-system directory for the voice message WAV files and other message attachments saved in that mailbox store.

Although there is one mailbox-store database for each mailbox store, there is only one directory database for the entire system. If you create an additional mailbox store and move the mailboxes for selected users to the new store, the directory information for the users remains in the directory database that was created when Connection was installed.

Creating additional mailbox stores is primarily useful for ensuring that backups will complete during non-business hours. For more information, see the "Backups with Multiple Mailbox Stores" section on page 22-3.

After you create a new mailbox store, you can either move existing mailboxes into the new store or you can create new mailboxes in the new store. For information on moving existing mailboxes into the new store, see the "Moving Mailboxes Between Mailbox Stores in Cisco Unity Connection 8.x" section on page 22-5.

See the following sections for additional details:

- Replication, page 22-2
- User Templates, page 22-2
- Maximum Size of a Mailbox Store Before Warnings Are Logged, page 22-3
- Backups with Multiple Mailbox Stores, page 22-3

Replication

When you install two or more Cisco Unity Connection servers in a cluster, all mailbox stores are replicated to all servers in the cluster.

User Templates

When you create a new user account, you select the template whose settings are used as the default values for the new user account. One of the template settings specifies the mailbox store in which the mailbox is created. All default templates specify that mailboxes be created in the default mailbox store. If you create new mailbox stores, you can change this setting in the default templates and in any new templates that you create.

When you create a new template or edit a template to change the mailbox store in which new mailboxes are created, Cisco Unity Connection Administration allows you to select a mailbox store that is currently disabled. However, when you create a user account by using the template, if the store is still disabled, creating the user account fails.

If a mailbox store is the default mailbox store for one or more templates, you cannot delete that mailbox store until the template setting is changed or the template is deleted.

For more information on templates, see the "Adding, Modifying, or Deleting a User Template in Cisco Unity Connection 8.x" chapter of the *User Moves, Adds, and Changes Guide for Cisco Unity Connection Release 8.x*, at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/user_mac/guide/8xcucmacx.html.

Maximum Size of a Mailbox Store Before Warnings Are Logged

When you create a new mailbox store, you specify the maximum amount of disk space that the voice messages for the mailbox store can occupy. The maximum size is not an absolute maximum. When a mailbox store reaches the specified value:

- Connection still saves new messages in the mailbox store.

- You can still create new mailboxes in the mailbox store.

- You can still move mailboxes into the mailbox store.

When the size of the store reaches 90 percent of the specified maximum size, a warning is logged in the system log.

When the size of the store reaches 100 percent of the specified maximum size, an error is logged in the system log. In addition, in Cisco Unity Connection Administration, an error appears in the status bar on the Edit Mailbox Store page.

If you want to keep the mailbox store under 100 percent of the specified maximum size, you can:

- Increase the maximum size of the mailbox store, if there is additional space available on the hard disk. See the "Changing the Maximum Size a Mailbox Store Can Reach Before Warnings Are Logged in Cisco Unity Connection 8.x" section on page 22-6. Do not use this option if the mailbox store is already at the maximum size that can be backed up during non-business hours.

- Have users delete messages to reduce the size of their mailboxes, which also reduces the total size of the mailbox store.

    > **Note**   When users delete messages, the deleted messages are not removed from the mailbox store until the next time that the Clean Deleted Messages task runs. This task runs every 30 minutes; the schedule cannot be edited.

- Revise the message aging policy or mailbox size quotas to reduce the size of individual mailboxes and, therefore, the size of the mailbox store. We recommend that you have users delete messages from their mailboxes first, so that users who are not currently over the quota are not forced over the quota by the new values. For more information on message aging policy and on mailbox size quotas, see the "Controlling the Size of Mailboxes in Cisco Unity Connection 8.x" chapter.

- Create another mailbox store and move some mailboxes into the new mailbox store.

Backups with Multiple Mailbox Stores

When deciding on the maximum size for a mailbox store, consider the duration of backups. The Disaster Recovery System must back up an entire mailbox store and the corresponding database during a single backup session. Because the Disaster Recovery System has a significant impact on system performance, each mailbox store must be a size that can be backed up during non-business hours. We chose the default size of 15 GB (approximately 30 minutes of recordings for each of 1,000 users when the codec is G.711)

because a mailbox store of that size can be backed up in about six hours at 3 GB per hour. (The maximum size of a mailbox store does not include the 1.25 GB for the database that contains information on the messages in the mailbox store.)

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Caution   For tape backups, the Disaster Recovery System can only save one backup session on a tape. If you create multiple mailbox stores and back up the stores in separate sessions, you must change tapes between sessions or the second backup overwrites the first backup.

For more information on how to back up multiple mailbox stores, see the applicable document:

- For Cisco Unity Connection, see the *Disaster Recovery System Administration Guide for Cisco Unity Connection Release 8.x* at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/8x/drs_administration/guide/8xcuc drsag.html.

- For Cisco Unified CMBE, see the *Disaster Recovery System Administration Guide for Cisco Unified CMBE* at http://www.cisco.com/en/US/products/ps7273/prod_maintenance_guides_list.html.

Creating a Mailbox Store in Cisco Unity Connection 8.x

Revised May 2, 2012

To Create a Mailbox Store

Step 1   Sign in to Cisco Unity Connection Administration as a user that has the System Administrator role.

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Note   A user account that does not have the System Administrator role cannot create a new mailbox store.

Step 2   Expand **Message Storage**, then select **Mailbox Stores**.

Step 3   On the Search Mailbox Store page, select **Add New**.

Step 4   On the New Mailbox Store page, enter settings as applicable.

✎

Note   Fields marked with an * (asterisk) are required.

Step 5   Select **Save**.

✎

Note   Creating the database for the new mailbox store requires several minutes.

When the new mailbox store has been created, it appears in the table on the Search Mailbox Stores page, the value of the Access Enabled column changes to **Yes**, and the value of the Status column changes from Creating Mailbox Store to **OK**.

Note   It is recommended to configure a maximum of 5000 user mailboxes in a single mailstore for optimal performance.

Moving Mailboxes Between Mailbox Stores in Cisco Unity Connection 8.x

When moving mailboxes between mailbox stores, note the following:

- When a mailbox is moved to another message store, the MWI status is retained.
- When clustering is configured, you must sign in to the server whose server status is primary to move mailboxes.
- Moving a mailbox fails if:
  - The administrator currently signed in to Cisco Unity Connection Administration is not authorized to move a mailbox.
  - The source or target mailbox store is disabled because, for example, the mailbox store is being backed up.
  - The mailbox is disabled.
  - The user whose mailbox you are moving is a system user. System mailboxes cannot be moved out of the default mailbox store, UnityMbxDb1.

To Move Mailboxes from One Mailbox Store to Another

Step 1   Sign in to Cisco Unity Connection Administration as a user that has the System Administrator role.

Note   A user account that does not have the System Administrator role cannot move mailboxes between mailbox stores.

Step 2   In Cisco Unity Connection Administration, expand **Message Storage**, then select **Mailbox Stores Membership**.

Step 3   On the Search Mailbox Stores Membership page, in the Choose Membership Type list, select **User Mailbox**.

Step 4   Under User Mailbox Search Results, specify the mailbox store from which you want to move mailboxes.

Step 5   Specify search criteria to further identify the users whose mailboxes you want to move, and select **Find**.

The specified users appear in the table at the bottom of the page.

Step 6   Select the mailbox store to which you want to move mailboxes.

Step 7   Check the applicable check boxes to select the users whose mailboxes you want to move.

Step 8   Select **Move Selected Mailboxes**.

Changing the Maximum Size a Mailbox Store Can Reach Before Warnings Are Logged in Cisco Unity Connection 8.x

To Change the Maximum Size a Mailbox Store Can Reach Before Warnings Are Logged

Step 1   Sign in to Cisco Unity Connection Administration as a user that has the System Administrator role.

> ✎
>
> **Note**   A user account that does not have the System Administrator role cannot change the size of a mailbox store.

Step 2   In Cisco Unity Connection Administration, expand **Message Storage**, then select **Mailbox Stores**.

Step 3   On the Search Mailbox Store page, select the name of the mailbox store.

Step 4   On the Edit Mailbox Store page, change the value of the **Maximum Size Before Warning** field.

Step 5   Select **Save**.

Deleting a Mailbox Store in Cisco Unity Connection 8.x

Cisco Unity Connection Administration does not allow an administrator to delete a mailbox store when any of the following are true:

- The mailbox store still contains one or more mailboxes.
- The mailbox store is still referenced by one or more templates.
- The administrator who is trying to delete the mailbox store does not have permission to delete a mailbox store.
- The administrator is trying to delete the default mailbox store, UnityMbxDb1.

To Delete a Mailbox Store

Step 1   Sign in to Cisco Unity Connection Administration as a user that has the System Administrator role.

> ✎
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> **Note**   A user account that does not have the System Administrator role cannot delete a mailbox store.

Step 2   If you know the mailbox store does not contain any mailboxes, skip to Step 3. If you do not know, do the following steps to find mailboxes, if any, and to move them to other mailbox stores:

    a.   In Cisco Unity Connection Administration, expand **Message Storage**, then select **Mailbox Stores Membership**.

    b.   In the Choose Membership Type list, select **User Mailbox**.

    c.   Under User Mailbox Search Results, specify the mailbox store from which you want to move mailboxes.

    d.   Specify search criteria to further identify the users whose mailboxes you want to move, and select **Find**.

The specified users appear in the table at the bottom of the page.

    e. Select the mailbox store to which you want to move mailboxes.

    f. Check the applicable check boxes to select the users whose mailboxes you want to move.

    g. Select **Move Selected Mailboxes**.

Step 3   If you know that no user templates reference the mailbox store that you want to delete, skip to Step 4. If you do not know, do the following steps to find templates, if any, and to reassign the templates to other mailbox stores:

    a. On the Search Mailbox Stores Membership page, in the Choose Membership Type list, select **User Template**.

    b. Under User Mailbox Search Results, select the options to find the user templates that reference the mailbox store that you want to delete, and select **Find**.

    c. If any templates are found, check the applicable check boxes to select them, select the mailbox store that you want the templates to reference instead, and select **Assign Selected Templates**.

Step 4   In Cisco Unity Connection Administration, expand **Message Storage**, then select **Mailbox Stores**.

Step 5   On the Search Mailbox Store page, check the check box for the mailbox store that you want to delete.

Step 6   Select **Delete Selected**.

Step 7   Select **OK** to confirm.

Disabling and Re-Enabling a Mailbox Store in Cisco Unity Connection 8.x

Each mailbox store is disabled automatically while it is being backed up by the Disaster Recovery System. When a mailbox store is disabled:

- You cannot create a new mailbox in the store.
- You cannot move existing mailboxes into or out of the store.
- New messages for users whose mailboxes are in the disabled store are queued for delivery when the store is re-enabled.

Although Cisco Unity Connection Administration includes an option to manually disable a mailbox store, there is currently no reason to do so.

■ **Disabling and Re-Enabling a Mailbox Store in Cisco Unity Connection 8.x**