Controlling the Size of Mailboxes in Cisco Unity Connection 10.x

Note To help control the size of user voice mailboxes, you can use Cisco Unity Connection Administration to specify mailbox size quotas and to change the message aging policy. See the following sections:

Specifying Mailbox Size Quotas in Cisco Unity Connection 10.x

To help control the size of user voice mailboxes, Cisco Unity Connection lets you specify quotas, or limits, on the maximum size of voice mailboxes. By default, Unity Connection is configured with the systemwide mailbox size quotas listed in Table 26-1. To change systemwide quotas, do the "To Change the Default Systemwide Quotas" procedure on page 26-2.

Caution Quotas are not enforced for messages left by outside callers if the "Full Mailbox Check for Outside Caller Messages" check box is not checked. This check box appears on the Message Storage > Mailbox Quotas page. For more information, see Help for that page.

You can override systemwide quotas by specifying custom quotas for users and for templates. For a procedure, see the "Mailbox-Size Quotas in Cisco Unity Connection 10.x" section in the "Setting Up Features and Functionality That Are Controlled by User Account Settings in Cisco Unity Connection 10.x" chapter of the *User Moves, Adds, and Changes Guide for Cisco Unity Connection Release 10.x*, at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/10x/user_mac/guide/10xcucmacx.html.

Caution Quotas alone are only practical for controlling the size of mailboxes for users who regularly check Unity Connection voice messages by using the telephone user interface. Web Inbox and ViewMail for Outlook do not inform users that their mailbox has reached its quota. If users check messages primarily or

exclusively by using Web Inbox or ViewMail for Outlook, configure message aging, too, so old messages are automatically deleted. See the "Managing Message Aging Policies in Cisco Unity Connection 10.x" section on page 26-4.

When single inbox is configured, messages that users delete by using Outlook are only moved to the Deleted Items folder in Outlook, not permanently deleted. When Unity Connection synchronizes with Exchange, messages that have been deleted in Outlook are moved to the Unity Connection Deleted Items folder; the messages are not permanently deleted from Unity Connection. If you configure message quotas in this configuration, we recommend that you also configure message aging. For more information on message aging, see the "Managing Message Aging Policies in Cisco Unity Connection 10.x" section on page 26-4.

Table 26-1 Mailbox-Size Quotas by Codec

Quota Level	Mailbox Size That Triggers Quota Action	Action When Quota Is Reached	Recording Time Before Quota Is Reached/ Disk Space Used					
			G.711 Mu-Law	G.711 A-Law	G.726	PCM 8 kHz	G.729a	GSM 6.10
Warning	12 MB	The user is warned that the mailbox is reaching the maximum size allowed.	18 min./ 11 KB/sec	18 min./ 11 KB/sec	37 min./ 5.53 KB/sec	9 min./ 22 KB/sec	122 min./ 1.67 KB/sec	91 min./ 2.25 KB/sec
Send	13 MB	The user is prevented from sending any more voice messages.	20 min./ 11 KB/sec	20 min./ 11 KB/sec	40 min./ 5.53 KB/sec	10 min./ 22 KB/sec	132 min./ 1.67 KB/sec	98 min./ 2.25 KB/sec
Send/ Receive	14 MB	The user is prevented from sending or receiving any more voice messages.	21 min./ 11 KB/sec	21 min./ 11 KB/sec	43 min./ 5.53 KB/sec	10 min./ 22 KB/sec	143 min./ 1.67 KB/sec	106 min./ 2.25 KB/sec

To Change the Default Systemwide Quotas

Step 1 In Cisco Unity Connection Administration, expand **Message Storage**, then select **Mailbox Quotas**.

Step 2 Set values for the following quotas, as applicable, by selecting **Custom** and then entering a value (in megabytes) in the adjacent field:

- Warning Quota
- Send Quota
- Send/Receive Quota

Note The value for **Warning Quota** must be smaller than or equal to the value for **Send Quota,** and that the value for **Send Quota** must be smaller than or equal to the value for **Send/Receive Quota.**

Step 3 If you want Unity Connection to determine whether a user mailbox is full before allowing an outside caller to leave a message for the user, check the **Full Mailbox Check for Outside Caller Messages** check box.

Step 4 Select **Save**.

Managing Mailbox Quota Alert in Cisco Unity Connection 10.x

Cisco Unity Connection allows you to specify the maximum size or quota for the voice mailbox of every user in a Unity Connection system. In Unity Connection 9.1(1) and earlier releases, when a user exceeds the maximum assigned quota, the user is prompted within the Telephone User Interface for the voice mailbox quota overflow.

Beginning with Cisco Unity Connection 10.0(1) and later releases, when the voice mailbox size of a user starts reaching its specified threshold limit on Unity Connection, the user will receive a quota notification message.

A quota notification message is an email that is sent automatically by Unity Connection to the corporate email address of the voice mailbox when the voice mailbox size of the user exceeds it's threshold limit. You can use Cisco Unity Connection Administration to view the default quota notification message or to create, view, and modify customized quota notification messages.

The quota notification message is sent by the **Quota Notification Mail** task to the configured corporate addresses of the users whose voice mailbox has reached the size specified for warning quota. By default, the task is scheduled to run at 11:00 P.M. on daily basis. However, you can also customize the time and the interval after which the task must run. For more information on scheduling a task, refer to the "Task Schedule" section of "Cisco Unity Connection 10.x Tool Settings" chapter of *Interface Reference Guide for Cisco Unity Connection Administration Release 10.x* at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/10x/gui_reference/guide/10xcucgrgx.html.

Note The quota notification messages are not sent to the users whose corporate email addresses are not configured.

You can also execute the following command through CLI to run the **Quota Notification Mail** task:

```
run cuc sysagent task Umss.QuotaNotificationMailTask
```

Where **Umss.QuotaNotificationMailTask** is the name of the **Quota Notification Mail** task.

For more information on this command, see the "run cuc sysagent task" section of the "Run commands" chapter of *Command Line Interface Reference Guide for Cisco Unified Communications Solutions, Release 10.0(1)* at http://www.cisco.com/en/US/docs/voice_ip_comm/cucm/cli_ref/10_0_1/CUCM_BK_CBEED39F_00_cucm-cli-reference-guide-100_chapter_0101.html.

Configuring Mailbox Quota Alert Text

If you want to customize the Subject Line or Body Text of the mailbox quota alert emails that are sent to users, do the following procedure.

To Customize the Mailbox Quota Alert Text

Step 1 In Cisco Unity Connection Administration, expand **Message Storage> Mailbox Quotas** and then select **Quota Alert Text**.

Step 2 On the **Edit Mailbox Quota Alert Text** page, in the **Language** list, select the applicable language.

Step 3 To customize text for a mailbox **Quota Alert Text,** do the following sub-steps:

a. Uncheck the **Use Default Text** check box.

b. Enter text in the **Subject Line** and **Body Text** fields bases on your requirements . See Table 24-1 for a list of available parameters.

Step 4 Select Save.

Step 5 Repeat Step 2 through Step 4 for each language installed on the system.

Table 26-2 Mailbox Quota Alert Text Parameters

Parameter	Description
%CURRENTUSAGE%	When the %CURRENTUSAGE % parameter is used, it is replaced with the current voice mailbox size of the user.
%THRESHOLD%	When the % THRESHOLD% parameter is used, it is replaced with the warning quota size specified by the administrator.
%LIMIT%	When the %LIMIT % parameter is used, it is replaced with the maximum size allowed for voice mailbox or Send/Receive Quota.

Managing Message Aging Policies in Cisco Unity Connection 10.x

Message aging policies can help ensure that the hard disk where voice messages are stored does not fill up. Each policy allows you to specify message aging rules to automatically:

- Move new messages to the Saved Items folder after a specified number of days.

  This option is primarily useful for users whose message action is **Accept and Relay the Message**, which causes Unity Connection to relay copies of voice messages to an external mail account while also saving the messages to the Unity Connection message store. You can use this option to prevent users who only check voice messages by using the external mail account from exceeding their mailbox quota.

  For more information, see the "Message Actions in Cisco Unity Connection 10.x" section in the "Setting Up Features and Functionality That Are Controlled by User Account Settings in Cisco Unity Connection 10.x" chapter of the *User Moves, Adds, and Changes Guide for Cisco Unity Connection Release 10.x*, at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/10x/user_mac/guide/10xcucmacx.html.

- Move read messages to the Deleted Items folder after a specified number of days.

- Permanently delete messages in the Deleted Items folder after a specified number of days. In the Default System Policy message aging policy, this is the only rule that is enabled.
- Based on the age of the messages, permanently delete secure messages that have been touched in any way (for example by saving, deleting, or opening but then saving messages as new).
- Based on the age of the messages, permanently delete all secure messages regardless of whether users have listened to or touched the messages in any way.

If you only need one set of message aging rules, you can change the specifications for the default message aging policy and assign that one policy to all users and all templates. If you need to allow some users to retain messages longer than other users, you can create additional policies and assign different policies to user templates and to individual users. If you want to send message aging alerts to some users and not to others, you can create additional policies that include aging alerts.

For each policy, you can enable or disable each message aging rule, and you can specify a different number of days for each rule. For each message aging rule, you can also specify whether Unity Connection sends an email alert to users prior to aging the message.

You can also enable or disable an entire message aging policy; disabling a policy means that the rules in that policy are not enforced regardless of their settings. Unity Connection includes a default policy, **Do Not Age Messages**, that is disabled and for which all of the rules are disabled.

Some of the message aging rules are based on when a message was last modified. To modify a message, a user must do one of the following:

- In the Unity Connection Web Inbox or Messaging Inbox , mark the message as new, mark the message as deleted, or change the message subject, and select Save.
- From the phone interface, select the option to mark the message as new, resave the message, delete the message, or restore a deleted message as saved.

Simply listening to the message, without choosing one of these options, does not change the modification time of the message.

Note The schedule for message aging is controlled by the message aging task under **Task Management** in Cisco Unity Connection Administration.

See the following sections for additional details:

- About Message Aging Alerts, page 26-6
- Adding a Message Aging Policy, page 26-6
- Changing a Message Aging Policy, page 26-7
- Deleting a Message Aging Policy, page 26-7
- Configuring a Smart Host for Message Aging Alerts, page 26-8
- Configuring Message Aging Alert Text, page 26-8
- “Configuring Message Aging When Single Inbox Is Configured” section on page 26-9
- The “Message Aging in Cisco Unity Connection 10.x” section in the “Setting Up Features and Functionality That Are Controlled by User Account Settings in Cisco Unity Connection 10.x” chapter of the *User Moves, Adds, and Changes Guide for Cisco Unity Connection Release 10.x*, at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/10x/user_mac/guide/10xcucmacx.html.

About Message Aging Alerts

For each message aging rule, you can specify whether Unity Connection sends email alerts to users prior to taking the aging action that is associated with the rule. This gives users time to review and act on the applicable messages. You specify the number of days between the time that Unity Connection sends the alert and the time that the message aging action takes place.

Alerts cannot be sent to users unless the Corporate Email Address field for each user on the **Users > Users > Edit User Basics** page contains a valid email address. Unity Connection must also be configured to relay messages through an SMTP smart host.

You can customize the text in the email alerts or you can use the default text. The default subject line and body text are different for the alerts related to each aging rule, and they can be customized separately.

Note As all message aging policies use the same five rules, if you customize the alert text for a rule, the text will be the same for any policy that uses that rule. (For example, if you customize the email subject line and body text for the **Move Saved Messages to the Deleted Items Folder** rule, that text is used for all alerts that are sent to users who are assigned to any message aging policy for which that rule is enabled with alerts.)

Message aging alerts can be customized for multiple languages.

Adding a Message Aging Policy

Cisco Unity Connection includes a **Default System Policy** and a **Do Not Age Messages** policy, which is the policy that you assign to users whose messages should never be automatically deleted. If you want more than these two policies, do the following procedure.

To Add a Message Aging Policy

Step 1 In Cisco Unity Connection Administration, expand **Message Storage**, then expand **Message Aging**, then select **Aging Policies**.

In Cisco Unity Connection Administration, expand **Message Storage**, then select **Message Aging Policy**.

Step 2 Select **Add New**.

Step 3 Enter a name for the new policy, and select **Save**.

Step 4 Check the **Enabled** check box.

Step 5 Check the check box for each aging rule that you want to enable and specify the number of days after which the aging action will take place. See **Help** for information on individual aging rules.

Step 6 For each aging rule that you enabled in Step 5, indicate whether you want users to be alerted by email before the aging action takes place. Then specify the number of days prior to the message aging action that users will be alerted.

Step 7 Select **Save**.

For information on configuring which message aging policy is assigned to individual users and to templates, see the "Message Aging in Cisco Unity Connection 10.x" section in the "Setting Up Features and Functionality That Are Controlled by User Account Settings in Cisco Unity Connection 10.x" chapter of the *User Moves, Adds, and Changes Guide for Cisco Unity Connection Release 10.x*, at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/10x/user_mac/guide/10xcucmacx.html.

Changing a Message Aging Policy

To change settings in the Default System Policy or in any message aging policies that you have added, do the following procedure.

Caution Do not change settings in the **Do Not Age Messages** policy.

To Change a Message Aging Policy

Step 1 In Cisco Unity Connection Administration, expand **Message Storage**, then expand **Message Aging**, then select **Aging Policies**.

In Cisco Unity Connection Administration, expand **Message Storage**, then select **Message Aging Policy**.

Step 2 Select the name of the policy that you want to change.

Step 3 Change settings as applicable. See **Help** for information on individual fields.

Step 4 Select **Save**.

For information on changing which message aging policy is assigned to individual users and to templates, see the "Message Aging in Cisco Unity Connection 10.x" section in the "Setting Up Features and Functionality That Are Controlled by User Account Settings in Cisco Unity Connection 10.x" chapter of the *User Moves, Adds, and Changes Guide for Cisco Unity Connection Release 10.x*, at http://www.cisco.com/en/US/docs/voice_ip_comm/connection/10x/user_mac/guide/10xcucmacx.html.

Deleting a Message Aging Policy

If you want to delete a message aging policy, do the following procedure.

We recommend that you do not delete either the Default System Policy or the Do Not Age Messages policy. If you do not want to age messages, disable the Default System Policy instead of deleting it.

To Delete a Message Aging Policy

Step 1 In Cisco Unity Connection Administration, expand **Message Storage**, then expand **Message Aging**, then select **Aging Policies**.

In Cisco Unity Connection Administration, expand **Message Storage**, then select **Message Aging Policy**.

Step 2 Check the check box next to the name of the policy that you want to delete.

Step 3 Select **Delete Selected**.

Step 4 Select **OK** to confirm.

Configuring a Smart Host for Message Aging Alerts

To enable Cisco Unity Connection to send message aging alert emails to users, you must configure the Unity Connection server to relay messages through an SMTP smart host.

To Configure the Cisco Unity Connection Server to Relay Messages to a Smart Host

Step 1 In Cisco Unity Connection Administration, expand **System Settings > SMTP Configuration**, then select **Smart Host**.

Step 2 On the **Smart Host** page, in the **Smart Host** field, enter the IP address or fully qualified domain name of the SMTP smart host server. (Enter the fully qualified domain name of the server only if DNS is configured.)

Step 3 Select **Save**.

Step 4 On your SMTP server application, configure an SMTP smart host to accept messages from the Unity Connection server. For instructions, see the documentation for the SMTP server application that you are using.

Configuring Message Aging Alert Text

If you want to customize the **Subject Line** or **Body Text** of the message aging alert emails that are sent to users, do the following procedure.

To Customize the Message Aging Alert Text

Step 1 In Cisco Unity Connection Administration, expand **Message Storage**, then expand **Message Aging**, then select **Aging Alert Text**.

Step 2 On the **Edit Message Aging Alert Text** page, in the **Language** list, select the applicable language.

Step 3 For each of the five message aging rules, determine whether you want to use the default text for the email **Subject Line** and **Body Text**. If you decide to customize a rule, continue with Step 4.

Step 4 To customize text for a message aging rule, do the following sub-steps:

a. Uncheck the **Use Default Text** check box.

b. Enter text in the **Subject Line** and **Body Text** fields as applicable. See Table 26-3 for a list of available parameters.

c. Repeat a. through b. for each aging rule that you want to customize.

Step 5 Select **Save**.

Step 6 Repeat Step 2 through Step 5 for each language installed on the system.

Table 26-3 Message Aging Alert Text Parameters

Parameter	Description
%ARRIVALTIME%	When the %ARRIVALTIME% parameter is used, it is replaced with the date and time the message was received.
%DAYSUNTIL%	When the %DAYSUNTIL% parameter is used, it is replaced with the number of days until the applicable message aging action will be applied to the message.
%MODIFICATIONTIME%	When the %MODIFICATIONTIME% parameter is used, it is replaced with the date and time that the message was last touched by the recipient or the system. (For example, the recipient touches the message by saving, deleting, or opening and then saving the messages as new. The system touches the message when a message aging rule moves a new message to the saved messages folder or moves a saved message to the deleted items folder.)
%RECIPIENT%	When the %RECIPIENT% parameter is used, it is replaced with the display name of the message recipient.
%RECIPIENT_EXTENSION%	When the %RECIPIENT_EXTENSION% parameter is used, it is replaced with the extension number of the mailbox of the message recipient. This parameter might be useful if some users monitor multiple mailboxes.
%SENDER%	When the %SENDER% parameter is used, it is replaced with the display name of the sender of the message.

Configuring Message Aging When Single Inbox Is Configured

When single inbox is configured, messages that users delete by using Outlook are only moved to the Deleted Items folder in Outlook, not permanently deleted. When Unity Connection synchronizes with Exchange, messages that have been deleted in Outlook are moved to the Unity Connection Deleted Items folder. The messages are not permanently deleted from Unity Connection. We recommend that you configure message aging to permanently delete messages in the Deleted Items folder.

You can also configure message quotas, so that the Unity Connection conversation prompts users to delete messages when their mailboxes approach a specified size. See the "Specifying Mailbox Size Quotas in Cisco Unity Connection 10.x" section on page 26-1.

Message Recording Expiration

The Message Recording Expiration feature guarantees that a voice message that is stored on the Cisco Unity Connection server cannot be listened to after it reaches a set expiration date, regardless of whether the message has been forwarded to another Unity Connection recipient. Message Recording Expiration is a systemwide setting, and thus cannot be applied only to a subset of users.

You set the number of days after which messages arrive that they will expire. At expiration, message recordings are automatically replaced with a decoy recording that says, "The message has expired."

Typically, message aging rules are sufficient for enforcing message-retention policies. Note, however, that when a message is forwarded, the forwarded message is considered a new message and its age is reset. If you are concerned that users may forward messages in an attempt to circumvent the message-retention policy, consider enabling the Message Recording Expiration feature. The message recording and transcription (if any) expire based on the date that the original copy of the message arrived, regardless of user forwarding.

By default, the Message Recording Expiration feature is not enabled. You can enable and configure the feature on the **Message Storage Settings > Message Aging > Message Recording Expiration** page in Cisco Unity Connection Administration.

If you enable the **Message Recording Expiration** feature, we recommend that you configure the expiration time frame to be two to three times longer than the message aging time frame. (For example, if all of your messages are marked secure by default and you have a message aging policy set to permanently delete all secure messages older than 60 days, configure message recordings to expire in 180 days.)

Note The **Message Recording Expiration** feature does not apply to messages that have been forwarded to personal email addresses or to message recordings that have been saved locally to user workstations.

To prevent users from saving local copies or forwarding voice messages to personal email addresses, consider configuring Unity Connection to mark all messages as secure.Unity Connection applies the **Message Recording Expiration** feature to messages in the mailboxes of recipients that are homed on the Unity Connection server. For example, if User A homed on Unity Connection server A sends a message to User B homed on Unity Connection server B, the message will be subject to message expiration only if the **Message Recording Expiration** feature is enabled on server B.