



Messages

About Problems with Messages

Message problems fall into five categories:

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| Messages appear to be delayed | Some subscriber errors or misconceptions can lead to the impression that Cisco Unity is delaying messages. See the “Messages Appear to Be Delayed” section on page 4-2. |
| Messages seem to disappear | Some Exchange and Cisco Unity situations can affect message delivery. See the “Some Messages Seem to Disappear” section on page 4-3. |
| Messages are incomplete | A setup problem may cause callers to be cut off when they try to leave a message. See the “Cisco Unity Stops Recording Before a Caller Has Finished Leaving a Message” section on page 4-4. |
| Messages include dial tone or reorder tone | See the “Dial Tone or Reorder Tone Is Present at the End of a Message” section on page 4-6. |
| Subscribers hear messages at inconsistent sound levels | See the “Subscribers Hear Messages at Inconsistent Sound Levels” section on page 4-6. |

Begin your troubleshooting by gathering information about the message problem. By discussing the problem with the subscriber, sometimes you can determine whether a problem is due to a misunderstanding of how Cisco Unity works. If you encounter a message problem that is not described in this section, contact the Cisco Technical Assistance Center (TAC).

Messages Appear to Be Delayed

There are several possible reasons that messages may appear to be delayed. To confirm the arrival times of messages, generate a subscriber message activity report for the subscriber. For more information, see the “Subscriber Message Activity Report” section in the “Reports” chapter of the *Cisco Unity System Administration Guide*, available on Cisco.com at http://www.cisco.com/univercd/cc/td/doc/product/voice/c_unity/unity31/sag/index.htm.

In this section, possible causes for message delays are listed in order, from most likely to least likely to occur:

- [The Cisco Unity Primary Exchange Server Is Down or Is Disconnected](#), page 4-2
- [A Subscriber Misunderstands the Use of the # Key](#), page 4-2
- [The System Clock Time Is Incorrect](#), page 4-3
- [Exchange Settings Were Updated](#), page 4-3

The Cisco Unity Primary Exchange Server Is Down or Is Disconnected

Messages recorded while the primary Exchange server is down or disconnected are stored until the server is brought back up. The delay experienced between the time a message is recorded and its delivery is entirely dependant on the amount of time that the primary Exchange server was down or disconnected.

A Subscriber Misunderstands the Use of the # Key

For example, when a subscriber presses the # key while listening to a message, Cisco Unity saves the message as a new message and skips to the next message. Later, the subscriber checks messages again and hears the same message.

Explain to the subscriber that pressing the # key while a message plays saves it as a new message.

The System Clock Time Is Incorrect

For example, if the system clock is slow or if a desk clock is fast, the subscriber may believe messages were delayed.

Confirm that the system clock on the Cisco Unity server is reporting the correct time.

Exchange Settings Were Updated

When settings are changed for a subscriber in Exchange, the new values may not be reflected immediately in Cisco Unity.

Explain to the subscriber that the settings may take a few minutes to synchronize, causing a delay in receipt of messages.

Some Messages Seem to Disappear

In some situations, messages may not be delivered to the intended recipients. In this section, possible causes for this problem are listed in order, from most likely to least likely to occur:

- [The Network or Home Exchange Server Is Down, page 4-3](#)
- [A Mailbox Is Full, page 4-4](#)
- [Undeliverable Messages Have Not Been Forwarded to Recipients, page 4-4](#)

The Network or Home Exchange Server Is Down

This applies only if there are multiple Exchange servers. Increasing the Max Open Retries value and decreasing the Open Interval value will increase the number of tries and decrease the wait time Exchange uses when it tries to deliver a message after the network or server comes back up.

Change these message transfer agent (MTA) site configuration values, if needed, in the Exchange Administrator.

A Mailbox Is Full

When an Exchange mailbox has exceeded the Prohibit Send and Receive limit set in the Exchange Administrator, no new messages can be sent or received. When a recipient mailbox is full, an undeliverable message is returned to the sender.

Encourage the subscriber to dispose of messages promptly so that the Exchange mailbox does not fill up.

Undeliverable Messages Have Not Been Forwarded to Recipients

Messages returned to the Cisco Unity Messaging System mailbox are forwarded automatically to subscribers whose names appear on the Unaddressed Messages public distribution list. The messages then must be forwarded to the intended recipients.

Explain to subscribers on the Unaddressed Messages public distribution list the importance of regularly checking for and forwarding undeliverable messages.

Cisco Unity Stops Recording Before a Caller Has Finished Leaving a Message

There are several possible reasons that Cisco Unity may stop recording before a caller has finished leaving a message. In this section, possible causes are listed in order, from most likely to least likely to occur:

- [The Dialogic Quiet Parameter Is Incorrect, page 4-4](#)
- [Cisco Unity, the Phone System, or the Central Office Disconnected the Call, page 4-5](#)

The Dialogic Quiet Parameter Is Incorrect

A caller may report hearing a prompt and being prevented from completing a message, or a subscriber may report this problem after noticing that a recording ends before the caller finished leaving a message. This can happen when the quiet parameter is not set to recognize low voice volume. It also can happen when a changed quiet parameter is not retained after a Cisco Unity upgrade.

To change the Dialogic quiet parameter (systems equipped with Dialogic voice cards only)

- Step 1** Shut down Cisco Unity and stop the Telephony service.
 - Step 2** On the Windows Start menu, click **Programs > Dialogic System Software > Dialogic Configuration Manager–DCM**.
 - Step 3** On the Service menu, click **Stop Service**. A second Dialogic Configuration Manager window appears.
 - Step 4** When the message “Success: Dialogic service stopped” appears, click **Close**.
 - Step 5** In the Service window, select a **Dialogic** card.
 - Step 6** In the DCM–Properties dialog box for the card, click **Misc**.
 - Step 7** Click **ParameterFile**.
 - Step 8** In the Edit section, enter **quiet50.prm** in the Value box, and click **OK**.
 - Step 9** Repeat [Step 5](#) through [Step 8](#) for additional Dialogic cards.
 - Step 10** On the Service menu, click **Start Service**. A second Dialogic Configuration Manager window appears.
 - Step 11** When the message “Success: Dialogic service started” appears, click **Close**.
 - Step 12** Restart Cisco Unity.
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Cisco Unity, the Phone System, or the Central Office Disconnected the Call

If a caller reports being cut off while leaving a message and if the caller did not hear a prompt prior to the disconnect, Cisco Unity, the phone system, or the central office may have disconnected the call.

To determine why the call was disconnected

- Step 1** On the Windows Start menu, click **Programs > Administrative Tools > Event Viewer**.
- Step 2** On the Log menu, click **System**.
- Step 3** In the System Event log, look for an error that occurred at the time of the reported disconnected call. Double-click the error and skip to [Step 6](#).

If no errors appear for the date and time of the disconnected call, continue with [Step 4](#).

Step 4 On the Log menu, click **Application**.

Step 5 In the Application Event log, look for an error that occurred at the time of the reported disconnected call. Double-click the error.

Step 6 In the Event Detail dialog box, review the contents of the Description box.

If you need assistance interpreting or resolving the error, or if no error appears in the Application Event log that matches the date and time of the reported disconnected call, contact Cisco TAC.

Dial Tone or Reorder Tone Is Present at the End of a Message

A possible cause may be that the switch disconnect tone and/or the CO disconnect tone are incorrect in the switch.ini file (in circuit-switched phone systems only).

To determine the correct switch disconnect and CO disconnect tone values

Step 1 Run the Learn Tones utility. See the [“Learn Tones” section on page 9-7](#) for detailed instructions.

Step 2 If running the Learn Tones utility does not resolve the problem, contact Cisco TAC.

Subscribers Hear Messages at Inconsistent Sound Levels

A possible cause for subscribers hearing messages at inconsistent sound levels is that the automatic gain control (ACG) settings need adjustment.

Automatic gain control registry settings may need adjustment if, for example, a message left by a caller who is using a cellular phone is perceived as being too loud or too soft, while a message left by an internal caller is perceived as being at a normal sound level.

Cisco Unity automatic gain control is designed to give subscribers consistent message playback levels through the normalization of recordings. Cisco Unity automatic gain control is on by default, and is applied to voice samples after they have passed through all external hardware. Port, gateway, and external trunk configurations can produce inconsistent recording levels, and automatic gain control can be adjusted for individual ports if necessary. The audio codec chosen for message storage, legacy integration voice cards, and devices such as telephony cards and wave drivers, can also have an impact on message recording levels.

The following registry keys determine how Cisco Unity automatic gain control normalizes recordings. The entire device topology should be taken into consideration before automatic gain control settings are changed.

Key Name	Purpose	Recommended Setting
AGCtargetDB	Target root mean square (RMS) power to which all recordings are normalized. The setting is system-wide, with optional port-specific override available.	-12dB to -18dB (0 disables AGC)
AGCsampleSize	Buffer sample size used to calculate the average RMS power level.	20k (20k = approximately 1.5 seconds)
AGCuseCompression	Determines if a sample is clipped when a gain adjustment is applied. A value of 1 will not clip the sample; 0 clips the sample to the minimum/maximum values.	1 (0 = clipped sample; disables compression)
ACGgainThreshold	Maximum dB gain (+/-) applied to a sample to bring it to the target dB level.	40dB This value should not be changed.

To adjust the Cisco Unity automatic gain control settings

Step 1 Start Regedit.



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 a typical backup of the Cisco Unity server does not back up the registry. Also note that for a Cisco Unity failover system, 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.

Step 2 If you do not have a current backup of the registry, click **Registry > Export Registry File**, and save the registry settings to a file.

Step 3 Expand the key

HKEY_LOCAL_MACHINE\Software\Active Voice\Miu\1.0\Initialization

Step 4 Modify the value of **AGCtargetDB** as needed within the recommended range.

Step 5 If inconsistent recording levels are found on a certain port or group of ports—due to gateways, external trunks, or other port-specific factors—AGC can be configured on a per-port basis. Add the following key as needed for each affected port:

**HKEY_LOCAL_MACHINE\Software\Active Voice\Miu\1.0\Initialization
\Port n**

where **n** is the port number to which the AGC setting will be applied.

Step 6 Add the new DWORD value **AGCtargetDB** for each port key created in [Step 5](#) and set it to an appropriate value within the recommended range.

Step 7 Restart the Cisco Unity server.
