

Monitoring the System

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This chapter contains procedures for monitoring the Cisco Unity Express system's health and performance and includes the following sections:

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- Monitoring Future Messages, page 316
- Monitoring Active IMAP and VoiceView Express Sessions, page 318
- Monitoring Queues, page 319
- Displaying SNMP and Management Data Activity, page 320
- Viewing System Activity Messages, page 322
- Checking AIM Compact Flash Memory Wear Activity, page 323
- Viewing Historical Reports, page 323
- Viewing Real Time Reports, page 324

Monitoring Active Calls

This section describes the commands that permit monitoring of active calls on the Cisco Unity Express system and contains the following sections:

- Displaying Active Calls by Application, page 311
- Displaying Active Calls by Route, page 313
- Displaying Incoming Fax Calls, page 315
- Terminating an Active Call, page 316

Displaying Active Calls by Application

To display active calls by application, use the following command in Cisco Unity Express EXEC mode:

where **all** displays active calls for all applications, *application-name* displays active calls for the specified application, and **jtapi** and **sip** display active calls for those subsystems.

The command displays information about the port, the call, and the media.

The following is sample output for the show ccn call application command:

```
se-10-0-0-0# show ccn call application voicemail
```

```
Active Call Details for Subsystem :SIP
 **** Details for route ID :1200 ****
 _____
   ** Active Port #1:Call and Media info **
   _____
Port ID :4
Port Impl ID :16904
Port State : IN_USE
Call Id :241
Call Impl Id :FFCE47C8-669711D6-8C4BF237-80EC4A17@10.4.39.35
Call State :CALL_ANSWERED
Call active time(in seconds) :1
Application Associated :voicemail
Application Task Id :1700000122
Called Number :1200
Dialed Number :
Calling Number :1005
ANI :
DNIS :
CLID :sip:1005@10.4.39.35
Arrival Type :DIRECT
Last Redirected Number :
Original Called Number :
Original Dialed Number :
Media Id :6
Media State :IN_USE
Media Destination Address :10.4.39.35
Media Destination Port :16970
Destination Size :20
Destination Payload :G711ULAW64K
Media Source Address :10.4.39.135
Media Source Port :16904
Source Size :30
Source Payload :G711ULAW64K
se-10-0-0-0# show ccn call application promptmgmt
Active Call Details for Subsystem :SIP
_____
 **** Details for route ID :1202 ****
 _____
   ** Active Port #1:Call and Media info **
   _____
Port ID :3
Port Impl ID :16902
```

```
Port State : IN_USE
Call Id :242
Call Impl Id :92023CF-669811D6-8C50F237-80EC4A17@10.4.39.35
Call State :CALL_ANSWERED
Call active time(in seconds) :1
Application Associated :promptmgmt
Application Task Id :17000000123
Called Number :1202
Dialed Number :
Calling Number :1005
ANI :
DNIS :
CLID :sip:1005@10.4.39.35
Arrival Type :DIRECT
Last Redirected Number :
Original Called Number :
Original Dialed Number :
Media Id :5
Media State :IN_USE
Media Destination Address :10.4.39.35
Media Destination Port :18534
Destination Size :20
Destination Payload :G711ULAW64K
Media Source Address :10.4.39.135
Media Source Port :16902
Source Size :30
Source Payload :G711ULAW64K
```

Displaying Active Calls by Route

Cisco Unity Express supports displaying active calls by route. (A route is a trigger number configured for an application. Use the **show ccn trigger** command to display a list of configured triggers.)

To display active calls by route, use the following command in Cisco Unity Express EXEC mode:

show ccn call route [all [subsystem {jtapi | sip}] | route-address [subsystem {jtapi | sip}]]

where **all** displays active calls for all applications, *route-address* displays active calls for the specified route, and **jtapi** and **sip** display active calls for those subsystems.

The command displays information about the port, the call, and the media for both JTAPI and SIP subsystems.

The following example is sample output for the **show ccn call route all** command:

Call State :CALL_ANSWERED Call active time(in seconds) :6 Application Associated :voicemail Application Task Id :1700000010 Called Number :2200 Dialed Number : Calling Number :2001 ANI : DNIS : CLID : Arrival Type :DIRECT Last Redirected Number : Original Called Number :2200 Original Dialed Number : Media Id :2 Media State :IN_USE Media Destination Address :172.16.59.11 Media Destination Port :22814 Destination Size :20 Destination Payload :G711ULAW64K Media Source Address :10.4.14.133 Media Source Port :16388 Source Size :20 Source Payload :G711ULAW64K ** Active Port #2:Call and Media info ** Port ID :1 Port Impl ID :2225550150 Port State :IN_USE Call Id :10 Call Impl Id :1567/1 Call State :CALL_ANSWERED Call active time(in seconds) :6 Application Associated :voicemail Application Task Id :1700000011 Called Number :2200 Dialed Number : Calling Number :2003 ANI : DNIS : CLID : Arrival Type :DIRECT Last Redirected Number : Original Called Number :2200 Original Dialed Number : Media Id :1 Media State :IN_USE Media Destination Address :172.16.59.12 Media Destination Port :27928 Destination Size :20 Destination Payload :G711ULAW64K Media Source Address :10.4.14.133 Media Source Port :16386 Source Size :20 Source Payload :G711ULAW64K

The following example displays active calls for the route 1200, which is a trigger number for the voice-mail application.

```
se-10-0-0-0# show ccn call route 1200
Active Call Details for Subsystem :SIP
 _____
 **** Details for route ID :1200 ****
 -----
   ** Active Port #1:Call and Media info **
   _____
Port ID :8
Port Impl ID :16912
Port State : IN_USE
Call Id :246
Call Impl Id :E682B0A9-673311D6-8C64F237-80EC4A17@10.4.39.35
Call State :CALL_ANSWERED
Call active time(in seconds) :0
Application Associated :voicemail
Application Task Id :17000000127
Called Number :1200
Dialed Number :
Calling Number :1005
ANI :
DNIS :
CLID :sip:1005@10.4.39.35
Arrival Type :DIRECT
Last Redirected Number :
Original Called Number :
Original Dialed Number :
Media Id :1
Media State : IN_USE
Media Destination Address :10.4.39.35
Media Destination Port :18812
Destination Size :20
Destination Payload :G711ULAW64K
Media Source Address :10.4.39.135
Media Source Port :16912
Source Size :30
Source Payload :G711ULAW64K
```

Displaying Incoming Fax Calls

To display a list of incoming fax calls when incoming calls are recorded, use the f**show ccn call fax incoming** command in Cisco Unity Express EXEC mode. This command displays the connection time, sender's phone number, and the receiver's phone number for all the incoming fax sessions.

The following example is sample output for the show ccn call fax incoming command:

Terminating an Active Call

An active call can be terminated by using the call's implementation ID or using the implementation ID of the port through which the call came in to the system. Use the **show ccn call route** command to obtain the call or port implementation ID. See "Displaying Active Calls by Route" on page 313.

To terminate an active call, use the following command in Cisco Unity Express EXEC mode:

ccn call terminate {callimplid | portimplid} impli-id

where *impli-id* is the implementation ID of the call or port.

The following example terminates a call with implementation ID 1567/1:

se-10-0-0-0# ccn call terminate call 1567/1

The following example terminates a call coming through a port with implementation 2225550150:

se-10-0-0-0# ccn call terminate port 2225550150

Monitoring Future Messages

Monitoring future messages involves the following procedures:

- Displaying Future Messages, page 316
- Deleting a Future Message, page 317

For a description of future messages, see "Configuring the Delivery of Future Messages" on page 266.

Displaying Future Messages

You can use several CLI commands to display information about future messages.

Displaying All Future Messages

To display details of all messages scheduled for future delivery, use the **show voicemail messages future** command in Cisco Unity Express EXEC mode.

The following is sample output for the command:

se-10-0-0-0# show voicemail messages future

Message ID:	JMX0637L023-NM-FOC08221WRB-731357131983				
Sender:	User1				
Recipient(s):	UserA				
Length(sec):	30				
Delivery time:	Mon, 11 April 2006 08:0000-0800 (PST)				
Message ID:	JMX0637L023-NM-FOC08221WRB-731183375855				
5					
Sender:	User2				
Sender: Recipient(s):	User2 UserB,UserG				
Sender: Recipient(s): Length(sec):	User2 UserB,UserG 20				
Sender: Recipient(s): Length(sec): Delivery time:	User2 UserB,UserG 20 Wed, 13 April 2006 10:15:00-0800 (PST)				

Displaying the Number of Future Messages for Each Subscriber

To display the number of messages scheduled for future delivery for each subscriber, use the **show voicemail mailboxes** command in Cisco Unity Express EXEC mode.

The following is sample output for the command:

se-10-0-0-0# show voicemail mailboxes

OWNER	MSGS	NEW	SAVE	DEL	BCST	FUTR	MSGTIME	MBXSIZE	USED
''user1''	25	25	0	0	0	1	2952	3000	98 %
''user2''	5	1	4	0	0	0	1933	3000	64 %
''user3''	5	5	0	0	0	2	893	3000	30 %
''user4''	5	5	0	0	0	1	893	3000	30 %
''user8''	5	5	0	0	0	1	893	3000	30 %
''user9''	5	5	0	0	0	0	893	3000	30 %

Displaying the Number of Scheduled Messages for a Subscriber

To display the number of scheduled messages for a specific subscribe, use the **show voicemail detail mailbox** command in Cisco Unity Express EXEC mode.

The following is sample output for the command:

se-10-0-0-0# show voicemail detail mailbox user2

Owner:	/sw/local/users/user2					
Type:	Personal					
Description:						
Busy state:	idle					
Enabled:	true					
Mailbox Size (seconds):	3927					
Message Size (seconds):	60					
Play Tutorial:	true					
Space Used (seconds):	60					
Total Message Count:	14					
New Message Count:	1					
Saved Message Count:	2					
Future Message Count:	2					
Deleted Message Count:	9					
Expiration (days):	30					
Greeting:	standard					
Zero Out Number:						
Created/Last Accessed:	Jan 23 2006 13:41:31 PST					

Deleting a Future Message

To delete a message scheduled for future delivery, use the following command in Cisco Unity Express EXEC mode:

voicemail message future message-id delete

where *message-id* is the message ID of the scheduled message. Use the **show voicemail messages future** command to display the message IDs of the scheduled messages.

An error message appears if *message-id* does not exist or if *message-id* does not belong to a message scheduled for future delivery.

The following example deletes a future message:

se-10-0-0-0# voicemail message future JMX0637L023-NM-FOC08221WRB-731357131983 delete

Cisco Unity Express 3.1 Voicemail CLI Administrator Guide

Monitoring Active IMAP and VoiceView Express Sessions

Several CLI commands are available for monitoring active IMAP and VoiceView Express sessions:

- Displaying IMAP Sessions, page 318
- Displaying VoiceView Express Sessions, page 318
- Terminating an Active VoiceView Express Session, page 318

Displaying IMAP Sessions

To display status information about active Internet Mail Access Protocol (IMAP) sessions, use the **show imap sessions** comand in Cisco Unity Express EXEC mode.

The following is sample output for the command:

se-10-0-0-0# show imap sessions

Sessions	IP Address	Connect Time	User ID
1	10.21.82.244	Wed Nov 16 01:35:02 CST 2005	user1
2	172.18.10.10	Wed Nov 16 03:23:15 CST 2005	user5

Note

This command is not available on the AIM-CUE.

Displaying VoiceView Express Sessions

To display status information about active VoiceView Express sessions, use the **show voiceview sessions** command in Cisco Unity Express EXEC mode.

The following is sample output for the command:

se-10-0-0-0# show voiceview sessions

Mailbox	RTP	User ID	Phone MAC Address
1013	Yes	user1	0015.C68E.6C1E
1016	No	user5	0015.629F.8706
1015	No	user3	0015.63EE.3790
1014	Yes	user6	0015.629F.888B
4 session(s) 2 active RTP s	tream(s)		

Note

This command is not available on the AIM-CUE.

Terminating an Active VoiceView Express Session

To terminate an active VoiceView Express session, use the following command in Cisco Unity Express EXEC mode:

service voiceview session terminate mailbox-id

where *mailbox-id* is the ID of the mailbox that has the active VoiceView Express session.

The following example terminates a VoiceView Express session for mailbox ID user 3:

se-10-0-0-0# service voiceview session terminate mailbox user3

Additionally, a new TUI or VoiceView Express session preempts and terminates an existing VoiceView Express session.

Monitoring Queues

Several CLI commands are available for monitoring Cisco Unity Express queues:

- Monitoring Network Queues, page 319
- Monitoring Notification Queues, page 319
- Monitoring Fax Queues, page 320

Monitoring Network Queues

To display status information about network queues, use the **show network queues** command in Cisco Unity Express EXEC mode.

The following example shows output from the command:

```
se-10-0-0-0# show network queues
```

```
Running Job Queue

        ID
        TYPE TIME
        RETRY SENDER
        RECIPIENT

        107
        VPIM 06:13:26
        20
        jennifer
        1001@sjc.r

        106
        VPIM 06:28:25
        20
        jennifer
        1001@sjc.r

                                                    1001@sjc.mycompany.com
                                                  1001@sjc.mycompany.com
Urgent Job Queue
_____
      TYPE TIME RETRY SENDER
                                                  RECIPIENT
TD
123 VPIM 16:33:39 1 andy
                                                   9003@lax.mycompany.com
Normal Job Queue
_____
     TYPE TIME
ID
                       RETRY SENDER
                                                    RECIPIENT
122 VPIM 16:33:23 1 andy
                                                    9001@lax.mycompany.com
124 VPIM 16:34:28 1
                               andy
                                                    9003@lax.mycompany.com
125 VPIM 16:34:57 1 andy 9002@lax.mycompany.com
```

Monitoring Notification Queues

To display status information about message notification queues, use the following command in Cisco Unity Express EXEC mode:

show voicemail notification queue {email | phone}

where **email** displays details about the e-mail queue, and **phone** displays details about the phone notification queue.

The following example shows output from two version of the **show voicemail notification queue** command:

```
se-10-0-0-0# show voicemail notification queue email
OWNER
             DEVICE TYPE
                               TIME
             Text Pager
                              723232
user1
            Email inbox
user1
                             2323343
se-10-0-0-0# show voicemail notification queue phone
OWNER
             DEVICE TYPE
                               TIME
             Numeric Pager
                               342343
user1
```

After a job enters one of the queues, you cannot delete the job. The system deletes the job after the notification is sent.

Monitoring Fax Queues

Faxes are always sent in queued mode. To display the fax queue for Cisco Unity Express IVR, use the **show ccn subsystem fax outbound fax** command in Cisco Unity Express IVR user EXEC mode.

The following example shows sample output from the command:

```
se-10-0-0-> show ccn subsystem fax outbound queue
Fax ID Recipient Subject Retry Scheduled
Count Send Time
15 9784551212 subject of Fax - max 30 char 1 2007/05/30 10:52:00
```

Displaying SNMP and Management Data Activity

If you have not configured Simple Network Management Protocol (SNMP) monitoring on the Cisco Unity Express system, see the procedure in the "Configuring SNMP Monitoring" section on page 325.

Use the following **trace** commands in Cisco Unity Express EXEC mode to display the SNMP and management data activity:

- trace snmp {agent all | agent debug | all}—Enables tracing of SNMP activities.
- trace management {agent all | agent debug | all }—Enables tracing of management data requests.

The following examples show sample output for these commands:

```
se-10-0-0-0# trace snmp agent all
se-10-0-0-0# show trace buffer tail
4280 06/03 10:10:31.035 snmp agnt 1
com.cisco.aesop.mgmt.snmp.SnmpNative.SnmpTableGetLong(CISCO-UNITY-EXPRESS-MIB,cueMboxTable
,cueMboxPercentTimeUsed,0) = cueMboxPercentTimeUsed
4280 06/03 10:10:31.100 snmp agnt 1
com.cisco.aesop.mgmt.snmp.SnmpNative.SnmpTableGetLong(CISCO-UNITY-EXPRESS-MIB,cueMboxTable
,cueMboxNumberOfMessages,1)
4280 06/03 10:10:31.100 snmp agnt 1
com.cisco.aesop.mgmt.snmp.MBeanUtil.invoke(Voicemail:name=Stats,MboxStatsTableValue,
```

```
<parms>, <signature>)
4280 06/03 10:10:31.109 snmp agnt 1
com.cisco.aesop.mgmt.snmp.SnmpNative.SnmpTableGetLong(CISCO-UNITY-EXPRESS-MIB, cueMboxTable
,cueMboxNumberOfMessages,1) = cueMboxNumberOfMessages
4280 06/03 10:10:31.171 snmp agnt 1
com.cisco.aesop.mgmt.snmp.SnmpNative.SnmpTableGetLong(CISCO-UNITY-EXPRESS-MIB,cueMboxTable
,cueMboxNumberOfMessages,0)
4280 06/03 10:10:31.171 snmp agnt 1
com.cisco.aesop.mgmt.snmp.MBeanUtil.invoke(Voicemail:name=Stats,MboxStatsTableValue,
<parms>, <signature>)
4280 06/03 10:10:31.180 snmp agnt 1
com.cisco.aesop.mgmt.snmp.SnmpNative.SnmpTableGetLong(CISCO-UNITY-EXPRESS-MIB, cueMboxTable
,cueMboxNumberOfMessages,0) = cueMboxNumberOfMessages
4280 06/03 10:10:31.241 snmp agnt 1
com.cisco.aesop.mgmt.snmp.SnmpNative.SnmpTableGetLong(CISCO-UNITY-EXPRESS-MIB, cueMboxTable
,cueMboxNumberOfNewMessages,1)
4280 06/03 10:10:31.241 snmp agnt 1
com.cisco.aesop.mgmt.snmp.MBeanUtil.invoke(Voicemail:name=Stats,MboxStatsTableValue,
<parms>, <signature>)
4280 06/03 10:10:31.250 snmp agnt 1
com.cisco.aesop.mgmt.snmp.SnmpNative.SnmpTableGetLong(CISCO-UNITY-EXPRESS-MIB, cueMboxTable
,cueMboxNumberOfNewMessages,1) = cueMboxNumberOfNewMessages
4280 06/03 10:10:31.313 snmp agnt 1
com.cisco.aesop.mgmt.snmp.SnmpNative.SnmpTableGetLong(CISCO-UNITY-EXPRESS-MIB, cueMboxTable
,cueMboxNumberOfNewMessages,0)
4280 06/03 10:10:31.313 snmp agnt 1
com.cisco.aesop.mgmt.snmp.MBeanUtil.invoke(Voicemail:name=Stats,MboxStatsTableValue,
<parms>, <signature>)
4280 06/03 10:10:31.322 snmp agnt 1
com.cisco.aesop.mgmt.snmp.SnmpNative.SnmpTableGetLong(CISCO-UNITY-EXPRESS-MIB, cueMboxTable
,cueMboxNumberOfNewMessages,0) = cueMboxNumberOfNewMessages
4280 06/03 10:10:31.384 snmp agnt 1
com.cisco.aesop.mgmt.snmp.SnmpNative.SnmpTableGetLong(CISCO-UNITY-EXPRESS-MIB, cueMboxTable
,cueMboxNumberOfSavedMessages,1)
4280 06/03 10:10:31.385 snmp agnt 1
com.cisco.aesop.mgmt.snmp.MBeanUtil.invoke(Voicemail:name=Stats,MboxStatsTableValue,
<parms>, <signature>)
4280 06/03 10:10:31.393 snmp agnt 1
com.cisco.aesop.mgmt.snmp.SnmpNative.SnmpTableGetLong(CISCO-UNITY-EXPRESS-MIB, cueMboxTable
,cueMboxNumberOfSavedMessages,1) =cueMboxNumberOfSavedMessages
4280 06/03 10:10:31.454 snmp agnt 1
com.cisco.aesop.mgmt.snmp.SnmpNative.SnmpTableGetLong(CISCO-UNITY-EXPRESS-MIB, cueMboxTable
,cueMboxNumberOfSavedMessages,0)
4280 06/03 10:10:31.455 snmp agnt 1
com.cisco.aesop.mgmt.snmp.MBeanUtil.invoke(Voicemail:name=Stats,MboxStatsTableValue,
<parms>, <signature>)
4280 06/03 10:10:31.463 snmp agnt 1
com.cisco.aesop.mgmt.snmp.SnmpNative.SnmpTableGetLong(CISCO-UNITY-EXPRESS-MIB, cueMboxTable
,cueMboxNumberOfSavedMessages,0) =cueMboxNumberOfSavedMessages
se-10-0-0-0# trace management agent all
se-10-0-0-0# show trace buffer tail
```

```
087 06/03 10:18:42.523 mgmt agnt 1
com.cisco.aesop.mgmt.voicemail.JTAPI.getJTAPConnectionStatus out
087 06/03 10:18:42.523 mgmt agnt 1
com.cisco.aesop.mgmt.voicemail.VoiceConnectivity.getUpdateStatus in
087 06/03 10:18:42.523 mgmt agnt 1 com.cisco.aesop.mgmt.voicemail.VoiceConnectviity.update in
087 06/03 10:18:42.524 mgmt agnt 1 com.cisco.aesop.mgmt.voicemail.VoiceConnectivity.udpateTables
in
087 06/03 10:18:42.525 mgmt agnt 1 com.cisco.aesop.mgmt.SysdbUtil.get(/sw/protorbcp,device)
```

087 06/03 10:18:42.526 mgmt agnt 1 com.cisco.aesop.mgmt.SysdbUtil.get(/hw/eth/eh0,ip,addrdefault) 087 06/03 10:18:42.529 mgmt agnt 1 com.cisco.aesop.mgmt.voicemail.JTAPIUtil.gettapiPortStatus in 087 06/03 10:18:42.574 mgmt agnt 1 com.cisco.aesop.mgmt.voicemail.JTAPIUtil.gettapiPortStatus {3504={id=3, implid=3504, state=IDLE}, 3503={id=0, implid=3503, tate=IDLE}, 3502={id=1, implid=3502, state=IDLE}, 3500={id=2, implid=3500, stat=IDLE}} 087 06/03 10:18:42.574 mgmt agnt 1 com.cisco.aesop.mgmt.voicemail.JTAPIUtil.gettapiPortStatus out 087 06/03 10:18:42.576 mgmt agnt 1 com.cisco.aesop.mgmt.SysdbUtil.get(/sw/apps/f/ccnapps/configurations/craAesop/ccnwfapp,wfjtapi,ci scoccnatcallmanager) 087 06/03 10:18:42.581 mgmt agnt 1 com.cisco.aesop.mgmt.voicemail.JTAPIUtil.getctiveCCM in 087 06/03 10:18:42.581 mgmt agnt 1 com.cisco.aesop.mgmt.SysdbUtil.get(/sw/limit,global,applicationMode) 087 06/03 10:18:42.602 mgmt agnt 1 com.cisco.aesop.mgmt.voicemail.JTAPIUtil.getctiveCCM out 087 06/03 10:18:42.604 mgmt agnt 1 com.cisco.aesop.mgmt.SysdbUtil.get(/sw/apps/f/ccnapps/configurations/craAesop/ccnwfapp,wfsip,pro viderHostname) 087 06/03 10:18:42.607 mgmt agnt 1 com.cisco.aesop.mgmt.SysdbUtil.get(/sw/apps/f/ccnapps/configurations/craAesop/ccnwfapp,wfsip,pro viderHostname) 087 06/03 10:18:42.610 mgmt agnt 1 com.cisco.aesop.mgmt.SysdbUtil.get(/sw/apps/f/ccnapps/configurations/craAesop/ccnwfapp,wfsip,pro viderPortnumber) 087 06/03 10:18:42.614 mgmt agnt 1 com.cisco.aesop.mgmt.SysdbUtil.get(/sw/limit,global,applicationMode) 087 06/03 10:18:42.615 mgmt agnt 1 com.cisco.aesop.mgmt.voicemail.VoiceConnectivity.udpateTables out 087 06/03 10:18:42.615 mgmt agnt 1 com.cisco.aesop.mgmt.voicemail.VoiceConnectivity.update out 087 06/03 10:18:42.616 mgmt agnt 1 com.cisco.aesop.mgmt.voicemail.VoiceConnectivity.getUpdateStatus out

Viewing System Activity Messages

Cisco Unity Express captures messages that describe activities in the system.

If you have not configured a syslog server, see the "Configuring a Syslog Server" section on page 294 for the procedure.

The system activities are categorized into four levels of severity depending on their impact on the system's functioning:

- Information—The message describes normal system activity, including debug, information, and notice messages.
- Warning—The message is an alert that a non-normal activity is occurring. The Cisco Unity Express system continues to function.
- Error—The message indicates that a system error has occurred. The Cisco Unity Express system may or may not have stopped functioning.
- Fatal—The message describes a critical, alert, or emergency situation with the system. The Cisco Unity Express system has stopped functioning.

These messages are collected and directed to three possible destinations:

- messages.log file—This option is the default. The file contains all system messages and resides on the Cisco Unity Express module hard disk. You can view them on the console or copy them to a server to review for troubleshooting and error reporting.
- Console—View the system messages as they occur with the log console info command.
- External system log (syslog) server—Cisco Unity Express copies the messages to another server and collects them in a file on that server's hard disk. The syslog daemon configuration on the external server determines which directory will save the messages log.

The external server must be configured to listen for User Datagram Protocol (UDP) on port 514 from the IP address of the Cisco Unity Express module.

Checking AIM Compact Flash Memory Wear Activity

Cisco Unity Express tracks the use and wear of the AIM compact flash memory as log and trace data are saved to the module. To display this data, use the **show interface ide 0** command in Cisco Unity Express EXEC mode.

```
show interface ide 0
```

The following is sample output:

Viewing Historical Reports

The Historical Reporting feature enables you to save information and statistics related to call and application events in a historical reporting database on the module. You can use this historical data later to generate various types of usage reports, using the Cisco Unified Communications Express Historical Reporting Client.

For information on how to configure Historical Reporting, see the "Configuring Historical Reporting" section on page 87.

To view historical reports, use the Administration > Historical Reporting option of the GUI. For instructions about using the Cisco Unified Communications Express Historical Reporting Client, see the G online help for the GUI.



To use the Historical Reporting feature, users must have their privileges set to ViewHistoricalReports.

Viewing Real Time Reports

The Real Time Reports feature enables you to view real-time statistics for various call-related and application-related events.

To view real-time reports, use the **Reports > Real Time Reports** option of the GUI. For more information about real-time reports, see the online help for the GUI.



To view Real Time Reports, users must have their privileges set to ViewRealtimeReports.