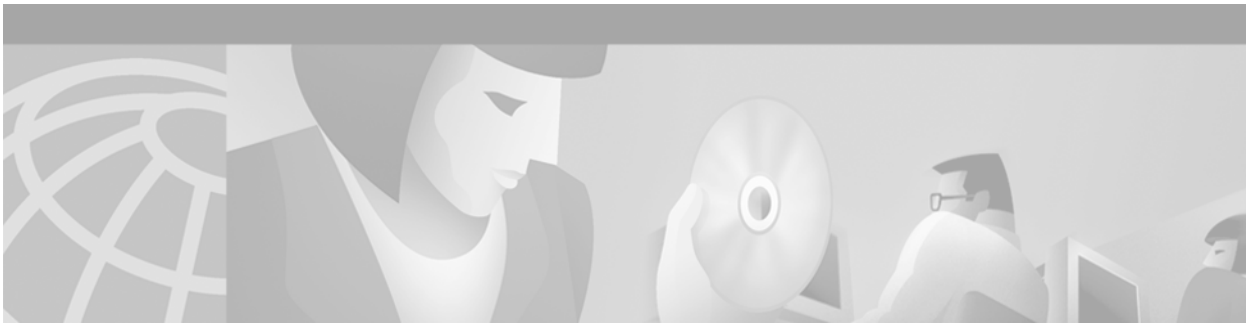

Release Notes for Cisco Universal Gateway Manager Version 1.0

These release notes contain important information and caveats for the Cisco Universal Gateway Manager Version 1.0. Information in this document supplements information in the *Cisco Universal Gateway Manager Users' Guide*.

For the most recent version of these release notes, go to:

http://www.cisco.com/univercd/cc/td/doc/product/rtrmgmt/ugm/relnote/ugm_note.htm

Contents

Cisco Systems

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Hardware Supported by Cisco EMF

The following table provides guidelines for your Cisco UGM installation. In making system hardware choices, consider your network deployment scenario and also see the "Network Configurations Supported by Cisco UGM" section on page 3.

Resource	Cisco EMF Server Option 1	Cisco EMF Server Option 2	Cisco EMF Client
Hardware	Sun Ultra 60 2 x 360 Mhz	Sun Ent 450 4 x 250 Mhz	Sun Ultra 5 Or Sun Ultra 10 1 x 360 Mhz
Operating System	Solaris 2.6	Solaris 2.6	Solaris 2.6
Memory	Minimum 1 GB RAM	Minimum 1 GB RAM	256 MB RAM
Disk Space	2 x 9 GB Disk	6 x 9 GB Disk	9 GB Disk
Swap Space	2 GB	2 GB	2 GB

Software Requirements

Software	Version	Patch Level	OS
Cisco EMF	3.0.4	Patches 15 and 15.2	Solaris 2.6

Cisco IOS Compatibility Matrix

Platform	IOS Image and Release	Modem Image	SPE Image	Notes
Cisco AS5350	c5350-js-mz.122.2.XA2 c5350-js-mz.122.2.XA3 c5350-js-mz.122.2.XA4 c5350-js-mz.12.1(3)XQ c5350-js-mz.12.2(1)XA	N/A	np.6.106.spe np.6.93.spe	General release image.
Cisco AS5400	c5400-js-mz.122.2.XA2 c5400-js-mz.122.2.XA3 c5400-js-mz.122.2.XA4 c5400-js40-mz.12.1(4.4) c5400-js-mz.12.2(1)XA	N/A	np.6.106.spe np.6.93.spe	General release image.

Cisco AS5800 including the UPC card	c5800-p4-mz.121-5.XM5 c5800-p4-mz.122-2.XB1 c5800-p4-mz.12.1(3a)T5 dsc-c5800-mz.12.1(3a)T5	mica-modem-pw.2.7.2.0.bin mica-modem-pw.2.7.3.0.bin	np.6.106.spe np.6.93.spe	Latest general release image from Cisco.com.
Cisco AS5850	c5850-p9-mz.121-5.XV3 c5850-p4-mz.122-2.XB1 c5850-p6-mz.12.1(5)XV	N/A	np.6.106.spe np.6.93.spe	This image is an experimental version.
Console 2560	igs-in-1 image in release 11.1(5)	N/A	N/A	N/A
Console 2511	c2500-i-l image in release 12.0(5)T c2500-i-l image in release 11.2(18)T	N/A	N/A	N/A

Network Configurations Supported by Cisco UGM

Cisco UGM is designed for flexible operation. With Cisco UGM, you select how often data is polled from the network and where SNMP traps will be forwarded. Performance, scalability, and the number of ports and devices managed all depend on your choices.

Note If you are planning to install more than one network management system on a single server, contact your CSE.

Cisco UGM 1.0 has been tested as a standalone product and may have limitations when installed with other network management systems on the same server.

Following is a list of variables that affect the performance and scalability of Cisco UGM:

- Type and configuration of the server used to deploy Cisco UGM (see the "Hardware Supported by Cisco EMF" section on page 2)
- MIBs that are polled
- Polling frequency for polled objects
- Presence polling of objects
- Number of clients connected to the management server
- Activities performed by the clients (including discovery, viewing performance data, and viewing near real-time displays)
- Number and type of Cisco Access Servers in the network
- Number of ports in the network
- Management bandwidth between the device and Cisco UGM
- Management bandwidth between Cisco UGM and the client
- Volume of event traffic received by Cisco UGM (steady state and burst traffic)
- Volume of SNMP event traffic forwarded by Cisco UGM

- Volume, storage duration, and frequency of inventory, fault, and performance data exported by Cisco UGM
- IOS, DSP, and configuration files uploaded or downloaded

There are many permutations for all the variables listed. The following section describes a scenario that was successfully tested and can be used as a guide to size a network domain managed by Cisco UGM.

Network Configuration Scenario

The following table shows a tested deployment scenario for a single management server with the associated qualifying parameters.

Note Cisco UGM manages high-density systems such as multi-DS3 Cisco AS5800 devices as well as low-density systems such as 2*PRI Cisco AS5350 devices. Depending on the mix of devices in your network, different ceilings will be reached for the maximum supported network size.

For example, 250 fully loaded Cisco AS5800 devices cannot be managed from a single server as this would exceed the 50,000 port limit.

Cisco UGM Network Element	Description
Type of server	Sun Ultra 60
Number of ports	50,000
MIBs polled	All Cisco UGM default MIBs
Performance polling interval	15 minutes
Number of clients	8 Sun Ultra 10 workstations
Sustained rate of SNMP traps	2 per second
Trap burst rate and duration of burst	5 traps per second for a 5-minute burst
Presence polling interval	15 minutes
Incremental port deployment	5,000 ports

About Excessive Incoming Traps

Excessive incoming traps may adversely affect Cisco UGM performance. If this occurs, evaluate incoming traps and disable those that are unnecessary (as shown in the following examples).

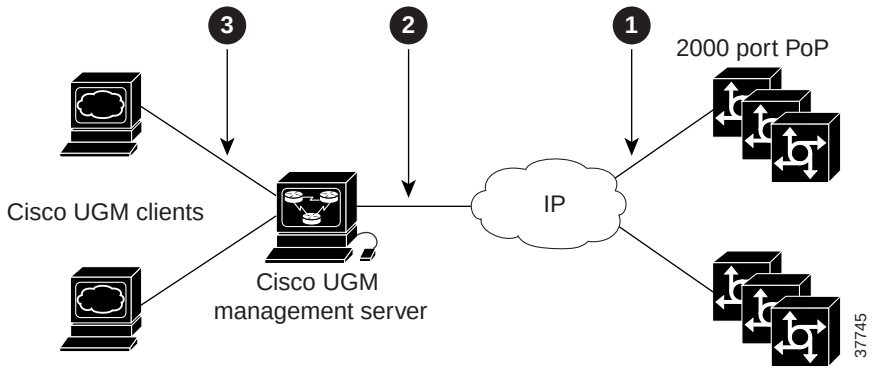
Examples of disabling incoming traps:

```
interface group-async0
no snmp trap link-status

interface virtual-template 1
no snmp trap link-status

interface dialer0
no snmp trap link-status
```

About Management Bandwidth

The following table and figure show the minimum bandwidth requirements for managing a 50,000 port network.

Network Point	Minimum Bandwidth Required
1	56 kbps
2	1544 kbps
3	56 kbps



About Renaming Objects in Map Viewer

Cisco UGM allows you to rename objects in Map Viewer. However, the new name cannot contain any spaces. Any spaces in the object name affect system IOS operations.

If you assign an object name with spaces and then attempt to perform any IOS operation such as Get Configuration, Send Configuration, Install IOS Image, Install Modem Image, or Install SPE Image, Cisco UGM displays the following message in the IOS Action Report window:

Cannot connect, please check the user name and password.

Discovery and Deployment Caveats

This section contains information about the discovery and deployment function of Cisco UGM.

Deleting Manually Deployed Device Objects (DDTS:CSCdr48990)

Deleting a site object from the Physical view in Map Viewer does not delete the manually deployed device objects in the site object.

Automatically deployed device objects follow the site object/device object relationship. When you manually deploy device objects Cisco UGM does not create the site object, and device objects are deployed without a site. During normal operation, when you delete a site object, the device objects contained in that site are also deleted.

The following procedure describes how to manually deploy device objects, delete the site in which they are contained, and then verify that the device objects themselves are not deleted.

Step 1 From the Map Viewer, right-click a site object.

Step 2 Choose **Deployment > Deploy Access Servers> Deployment Wizard—Templates**.

Step 3 Select the **Template for AS5*xxx* as Decommissioned**.

Step 4 Enter the number of objects that you want to deploy. If you enter a number greater than 1, repeat Step 5 for each object.

Step 5 Enter the IP address of the device that you want to deploy and click **Forward**.

Step 6 From the Map Viewer, select the site object containing the devices that you want to delete.

Step 7 Delete the site object.

Step 8 Expand the **AS5xxx** tab.

The devices in the deleted container object are listed.

Working Around the Condition

Step 1 From the left pane of the Map Viewer, select **AS5xxx**.

Step 2 Select the device objects and delete them.

Caution If you do not manually delete these objects, later attempts to discover them will fail.

Device Objects Cannot be Created in Region and Bay Containers (DDTS: CSCdt68717)

If you deploy region and bay containers and attempt to deploy device objects in them, the deployment fails.

Working Around the Condition

Create only site containers and name them to represent different areas of your network.

Tips Cisco UGM allows site containers to be nested; you can use this capability to represent your network's organization.

Rediscovering Identical Cards in a Chassis (DDTS: CSCdv07469)

When a chassis containing two identical cards is deployed, and you insert a third identical card in a chassis slot, the rediscovery fails. The chassis transitions to an errored state and then a normal state. The internal cache in ASMainCtrl is not synchronized with the database, and Cisco UGM may behave erratically.

Working Around the Condition

If you have more than two cards of the same type installed in a chassis and wish to install a third card, follow these recommendations:

Step 1 Install the third card in a slot numbered higher than those containing the two cards already installed.

Step 2 When the chassis returns to the normal state, check the Map Viewer for the new card.

Step 3 If the new card is not visible on the Map Viewer, check the ASMainCtrl.log file or the Event History table.

Step 4 If either source shows that the rediscovery failed, delete the chassis and deploy it again.

Note All performance and alarm information currently in the database (for this device) is erased.

Rediscovery Fails to Create New Objects (DDTS: CSCdv19501)

This condition can have several symptoms:

- Rediscovery fails to create new device and subcomponent objects. This is caused by a clash of object names created during rediscovery.

  The workaround is to delete the device object and deploy it again. This erases all performance and alarm information for this device.

- Changing the dial-shelf Id for a Cisco AS5800 device causes Cisco UGM to delete all subcomponents objects for the device.

  Rediscovery recreates the subcomponent objects, but all performance and alarm data for the objects is erased.

  To work around this condition, export the performance data to file before changing the dial-shelf Id for the device. (Refer to the *Cisco Universal Gateway Manager Users' Guide* for details.)

- Device configuration changes immediately followed by rediscovery causes erratic discovery of objects. Objects may be created, but name clashes occur during rediscovery.

  The workaround is to always reboot the device in order to allow configuration changes to take effect.

- Rediscovery fails to identify index changes on the device. This causes some objects to display incorrect information.

  There is no workaround for this condition.

Memory Leaks During Deployment and Deletion of Objects (DDTS: CSCdu01611)

During the deployment and deletion of subcomponent objects, memory leaks may occur. The memory loss is proportional to the number of subcomponent objects deployed or deleted. For every object that is either deployed or deleted, an estimated 64 bytes of memory are lost.

A symptom of this condition is the accidental exit (and restart) of the ASMainCtrl controller processes. Database corruption usually results from this condition.

Working Around the Condition

After large deployment operations, when your system is stabilized, stop and start Cisco EMF.

Note For every deployed or deleted object, an estimated 64 bytes of memory are lost. Based on the number of objects you deploy in an operation, calculate your system memory loss. This will assist you in determining when Cisco EMF should be stopped and started.

Performance Management Caveats

This section contains information about the performance management function of Cisco UGM.

Correcting the Presentation of Performance Polling MIB Variables (DDTS: CSCdt35957)

To view the relevant MIB fields, follow this procedure:

Step 1 From the Map Viewer, choose **ASEMSConfig > PerfPollConfig > Open Global Performance Polling Configuration**.

Step 2 Click the **Others** tab.

Step 3 In the CISCO-MEMORY-POOL-MIB-ciscoMemoryPoolTable, correct these fields:

CISCO-MEMORY-POOL-MIB-ciscoMemoryPool Table **Incorrect Fields**	**CISCO-MEMORY-POOL-MIB-ciscoMemoryPool Table** **Correct Fields**
Queue Number Within the Queue Set	Memory Pool Name
Number of Messages in the Sub-Queue	Memory Pool Free
Max Number of Messages Permitted in the Sub-Queue	Memory Pool Used
Number of Messages Discarded from the Queue	

Step 4 In the CISCO-QUEUE-MIB-cQStatsTable, correct these fields:

CISCO-QUEUE-MIB-cQStatsTable **Incorrect Field**	**CISCO-QUEUE-MIB-cQStatsTable** **Correct Fields**
ciscoEnvMonSupplyStatusDescr	Queue Number Within the Queue Set
	Number of Messages in the Sub-Queue
	Max Number of Messages Permitted in the Sub-Queue
	Number of Messages Discarded from the Queue

Step 5 In the CISCO-ENVMON-MIB-ciscoEnvMonSupplyStatusTable, correct these fields:

CISCO-ENVMON-MIB-ciscoEnvMonSupplyStatus Table Incorrect Fields	CISCO-ENVMON-MIB-ciscoEnvMonSupplyStatus Table Correct Fields
Memory Pool Name	ciscoEnvMonSupplyStatusDescr
Memory Pool Free	
Memory Pool Used	

Step 6 In the same dialog box, correct these spellings:

Incorrect Spelling	Correct Spelling
Memory Poll Name	Memory Pool Name
ciscoPingRceivedPackets	ciscoPingReceivedPackets

Note The fields in the CISCO-PING-MIB-ciscoPingTable are correct.

Missing Interface Data in Performance Polling File (DDTS: CSCds31288)

With the exception of Ethernet ports, other Cisco UGM-managed ports may not have all their data delivered to the performance data export file. This occurs because all relevant data is not always sent to the Cisco UGM system.

The ifTable in Cisco UGM is polled in order to monitor Ethernet port-related performance data. This data is then stored in the Cisco EMF database. Check the performance data export file to verify that Ethernet port-related information is always stored in the ifTable. However, in some cases other interface port data may be missing.

Note You cannot work around this condition.

Changing the Performance Polling ON/OFF Flag on a Powered-Down Device (DDTS: CSCdt30825)

To recreate the condition, follow this procedure:

Step 1 From the Map Viewer, right-click a device object and choose **Chassis > Start/Stop Performance Polling**.

Step 2 Click **performancePolling - ON**.

Step 3 Click **Save**.

Step 4 Power down the device.

Step 5 Click **performancePolling - OFF**.

The following error message appears:

Nothing changed in the dialog, operation was discarded.

Cisco UGM only polls devices that are in a Normal state. Since the device was powered down, it is no longer Normal, and polling has already stopped on the device.

When you attempt to stop performance polling on the device, the error message conveys that your last action did not impact performance polling which was already stopped for the device.

Working Around the Condition

Note Do not change the polling flag on devices that are not in the Normal state.

You can check the current state of the device by following this procedure:

Step 1 From the Map Viewer, select a device object.

Step 2 Right-click on the device object and choose **Tools > Open Object Configuration**.

Step 3 In the Object Configuration dialog box, select **CommonEM-MIB.controllerInfoAS5*xxx*Chassis** from the list of Object Types.

The attribute value of CommonEM-MIB.controllerState is the current state of the device.

Performance Polling the First 500 Rows of Multi-Index Tables (DDTS: CSCdv19475)

When performance polling a large table of data, the poller uses a table chunker to split the table into 500-row chunks. Only the first chunk is retrieved successfully.

Working Around the Condition

You can manually change the related object model file and reset the Cisco EMF system as described:

Step 1 Locate this file:

<CEMF_ROOT>/**config/objectTypes/x_dASMainEM.types**

Step 2 Open the x_dASMainEM.types file, and swap lines 17 and 18 in the file.

Step 3 Locate lines 24 and 25, and make these changes:

Old:

"SNMP:CISCO-MODEM-MGMT-MIB.cmSlotIndex,

SNMP:CISCO-MODEM-MGMT-MIB.cmPortIndex"

New:

"SNMP:CISCO-MODEM-MGMT-MIB.cmPortIndex,

SNMP:CISCO-MODEM-MGMT-MIB.cmSlotIndex"

Step 4 Save the changes.

Step 5 Back up the Cisco EMF database. (Refer to the *Cisco Universal Gateway Manager Users' Guide*.)

Step 6 Stop Cisco EMF operation. (Refer to the *Cisco Universal Gateway Manager Users' Guide*.)

Step 7 Reset the Cisco EMF database. (Refer to the *Cisco Universal Gateway Manager Users' Guide*.)

Caution When you reset the database all historical data is erased. Be sure to back up the database before you reset it.

Step 8 Start Cisco EMF.

Step 9 Initiate rediscovery or deployment of managed devices.

Fault Management Caveat

This section contains information about the fault management function of Cisco UGM.

Correcting the Description and Number of Alarms Displayed in the Event Browser (DDTS: CSCdt32217)

Note These alarms occur when a card is removed and re-installed in any slot of any Cisco UGM-managed device.

To recreate the condition, follow this procedure:

Step 1 From the Map Viewer, select the device object that you want discovery to start from.

Step 2 Right-click the device object and choose **Discovery > Auto discovery**.

Step 3 Remove an interface card from slot 1 of the device.

a. A warning alarm event occurs with this message:

Card removed from slot 7.

(Note the incorrect slot number in the message.)

b. An informational alarm event occurs with this message:

Card removed from slot 1.

Step 4 Re-insert the interface card into slot 1 of the device.

a. A warning alarm event occurs with this message:

Card inserted in slot 7.

(Note the incorrect slot number in the message.)

b. An informational alarm event occurs with this message:

Card inserted in slot 1.

c. A second informational alarm event occurs with this message:

Card inserted in slot 1.

(This second informational message is redundant.)

Note You cannot work around this condition.

File Export Caveat

This section contains information about the file export function of Cisco UGM.

Exiting File Export Properties Window (DDTS: CSCdt29344)

The File Export Properties window exits when the Physical tree is empty. To recreate the condition, follow this procedure:

Step 1 In the Map Viewer choose **Physical > ASEMSConfig > File Export > File Export Properties**.

Step 2 Click the **Inventory** tab.

Step 3 Click **Export Now**.

An Action Report window appears with the message that the inventory data export file is created. The File Export Properties dialog box closes and the following error message appears:

Application Exiting, Connection has been lost to the Cisco EMF Manager platform.

Note The symptoms and error message occur only when the Physical tree is empty.

Note You cannot work around this condition.

Obtaining Documentation

Check for the most recent version of these release notes at this location:

http://www.cisco.com/univercd/cc/td/doc/product/rtrmgmt/ugm/relnote/ugm_note.htm

The following sections provide sources for obtaining documentation from Cisco Systems.

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http://www.cisco.com/tac

P3 and P4 level problems are defined as follows:

- P3—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.
- P4—You need information or assistance on Cisco product capabilities, product installation, or basic product configuration.

In each of the above cases, use the Cisco TAC website to quickly find answers to your questions.

To register for Cisco.com, go to the following website:

http://www.cisco.com/register/

If you cannot resolve your technical issue by using the TAC online resources, Cisco.com registered users can open a case online by using the TAC Case Open tool at the following website:

http://www.cisco.com/tac/caseopen

Contacting TAC by Telephone

If you have a priority level 1(P1) or priority level 2 (P2) problem, contact TAC by telephone and immediately open a case. To obtain a directory of toll-free numbers for your country, go to the following website:

http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml

P1 and P2 level problems are defined as follows:

- P1—Your production network is down, causing a critical impact to business operations if service is not restored quickly. No workaround is available.
- P2—Your production network is severely degraded, affecting significant aspects of your business operations. No workaround is available.