



Connecting Cisco Unified Messaging Gateway Enhanced Network Modules to the Network

Revised: May 1, 2008, OL-16671-01

This guide describes how to connect Cisco Unified Messaging Gateway enhanced network modules to your network. It contains the following sections:

- [Cisco Unified Messaging Gateway Enhanced Network Modules, page 1](#)
- [Online Insertion and Removal of Cisco Network Modules Procedure, page 3](#)
- [Related Documents, page 5](#)
- [Obtaining Documentation, Obtaining Support, and Security Guidelines, page 5](#)

Cisco Unified Messaging Gateway Enhanced Network Modules

The Cisco Unified Messaging Gateway enhanced network module provides centralized management for larger Cisco Unity Express voicemail networks. The Cisco Unified Messaging Gateway enhanced network module:

- Intelligently routes voicemail messages
- Exchanges subscriber and directory information among the voicemail systems
- Provides interoperability with third party voicemail vendors within a voice messaging network

There are two versions of the Cisco Unified Messaging Gateway enhanced network module:

- NME-UMG supports up to 250 nodes.
- NME-UMG-EC supports up to 1000 nodes.



Americas Headquarters:
Cisco Systems, Inc., 170 West Tasman Drive, San Jose, CA 95134-1706 USA


Note

Cisco recommends attaching an uninterruptible power supply (UPS) to the router that houses the Cisco Unified Messaging Gateway enhanced network module. The UPS should include a signaling mechanism that directs the router to shut down the Cisco Unified Messaging Gateway application properly and then powers off the router.

Cisco IOS Release 12.3(4)T and later supports automatic switchover to the UPS device.


Note

The Gigabit Ethernet port and compact flash (CF) slot, though available on the hardware, are not supported by the Cisco Unified Messaging Gateway enhanced network module. The CF slot has a metal cover.

The Cisco Unified Messaging Gateway enhanced network module LEDs are shown in [Figure 1](#) and described in [Table 1](#).

Figure 1 NME-UMG Faceplate

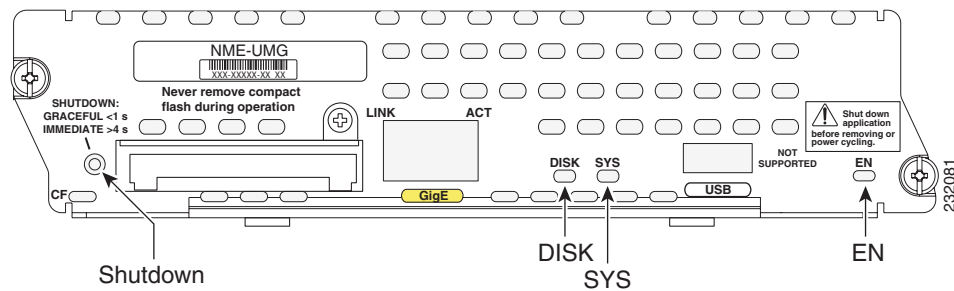


Table 1 NME-UMG LED Descriptions

SHUTDOWN	Press the SHUTDOWN button for less than 2 seconds to gracefully shut down the module. Press the SHUTDOWN button for more than 4 seconds to cause an immediate module shutdown, which may impact file operations that are in progress.
DISK	Status of hard drive activity: On—Active. Off—Inactive.
SYS	Status of system shutdown Note Do not remove power without first shutting down the application. On—Application is stable. Off—System is shut down and ready for host power-down. Flashing—System shutdown is in progress.
EN	Status of the network module: On—Detected by the host Cisco IOS software and enabled. Off—Disabled.

Shutting Down Cisco Unified Messaging Gateway Enhanced Network Modules

Press the SHUTDOWN button on the network module faceplate for less than 2 seconds to perform a graceful shutdown of the network module before removing power from the router or before starting an online insertion and removal (OIR) sequence on the router. The application may take up to 2 minutes to fully shut down.

**Caution**

If you press the SHUTDOWN button for *more than 4 seconds*, a nongraceful shutdown of the hard disk will occur and may corrupt files on the network module's hard disk. After a nongraceful shutdown, the HD and SYS LEDs remain lit. Press the SHUTDOWN button for *less than 2 seconds* to gracefully reboot the network module.

Online Insertion and Removal of Cisco Network Modules Procedure

Some Cisco routers allow you to replace network modules without switching off the router or affecting the operation of other interfaces. This feature is called *online insertion and removal (OIR)*. OIR of a module provides uninterrupted operation to network users, maintains routing information, and ensures session preservation.

**Caution**

Unlike other network modules, Cisco Unified Messaging Gateway enhanced network modules use hard disks. Online removal of network modules without proper shutdown can cause file system corruption and might render the disk unusable. You must shut down the operating system on the network module in an orderly way before removing or powering down the module.

**Caution**

Cisco routers support OIR with identical modules only. If you remove a module, install in its place another module exactly like the one you removed. If you remove a 2-slot module (along with any installed WAN or voice interface cards), install another module and card combination exactly like it.

For descriptions of informational and error messages that may appear on the console during this procedure, see the hardware installation guide for your router.

To perform online removal of a network module and insertion of a replacement, follow these steps, with the router in privileged EXEC mode:

Step 1 Initiate a network module session by using the following command:

```
Router# service-module integrated-Service-Engine slot/unit session
```

```
Trying 10.10.10.1, 2065 ... Open
```

```
SE-Module> enable
```

```
SE-Module#
```

Step 2 Save the running configuration of the network module by using the following command from the

```
SE-Module# prompt:
```

```
SE-Module# copy running-config tftp:
```

```
Address or name or remote host? tftp-server-address
```

Destination filename? *filename*



Note Depending on the specific TFTP server you are using, you might need to create a file with the same name on the TFTP server and verify that the file has the correct permissions before transferring the running configuration to the TFTP server.

Step 3 Exit the network module session by pressing **Control-Shift-6**, followed by pressing **x**.

Step 4 On the router, clear the integrated-Service-Engine console session by using the following command:

```
Router# service-module integrated-Service-Engine slot/unit session clear
```

Step 5 Perform a graceful shutdown of the network module disk drive by using the following command:

```
Router# service-module integrated-Service-Engine slot/unit shutdown
```

Step 6 Shut down the network module interface:

```
Router (config)# interface integrated-Service-Engine slot/unit
Router (config-if)# shutdown
Router (config-if)# exit
```

Step 7 Loosen the two captive screws that are holding the network module in the chassis slot.

Step 8 Slide the network module out of the slot.

Step 9 Align the replacement network module with the guides in the chassis slot, and slide it gently into the slot.



Note If the router is not fully configured with network modules, make sure that blank panels fill the unoccupied chassis slots to provide proper airflow.

Step 10 Push the module into place until you feel its edge connector mate securely with the connector on the backplane.

Step 11 Check that the network module LEDs are on. This inspection ensures that connections are secure and that the new unit is operational.

Step 12 Initiate a network module session by using the following command:

```
Router# service-module integrated-Service-Engine slot/unit session
```

```
Trying 10.10.10.1, 2129 ... Open
```

```
SE-Module> enable
```

```
SE-Module#
```

Step 13 Restore the network module running configuration by using the following command from the service module prompt:

```
SE-Module# copy tftp: running-config
Address or name or remote host? tftp-server-address
Source filename? filename
```

Step 14 Exit the network module session by pressing **Control-Shift-6**, followed by pressing **x**.

Step 15 On the router, clear the network module session by using the following command:

```
Router# service-module integrated-Service-Engine slot/unit session clear
```

Related Documents

For additional information, see the following documents and resources.

Related Topic	Document Title
Cisco Unified Messaging Gateway application software website and reference documentation	<i>Cisco Unified Messaging Gateway</i> http://www.cisco.com/en/US/products/ps8605/tsd_products_support_series_home.html
Regulatory compliance and safety information	<i>Cisco Network Modules and Interface Cards Regulatory Compliance and Safety Information</i> http://www.cisco.com/en/US/docs/routers/access/interfaces/rcsi/IOHrcsi.html
Cisco IOS software website and reference documentation	<i>Cisco IOS Software</i> http://www.cisco.com/web/psa/products/index.html?c=268438303

Obtaining Documentation, Obtaining Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

CCDE, CCENT, Cisco Eos, Cisco Lumin, Cisco Nexus, Cisco StadiumVision, the Cisco logo, DCE, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn is a service mark; and Access Registrar, Aironet, AsyncOS, Bringing the Meeting To You, Catalyst, CCDA, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, EtherFast, EtherSwitch, Event Center, Fast Step, Follow Me Browsing, FormShare, GigaDrive, HomeLink, Internet Quotient, IOS, iPhone, iQ Expertise, the iQ logo, iQ Net Readiness Scorecard, iQuick Study, IronPort, the IronPort logo, LightStream, Linksys, MediaTone, MeetingPlace, MGX, Networkers, Networking Academy, Network Registrar, PCNow, PIX, PowerPanels, ProConnect, ScriptShare, SenderBase, SMARTnet, Spectrum Expert, StackWise, The Fastest Way to Increase Your Internet Quotient, TransPath, WebEx, and the WebEx logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or Website are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (0805R)

Any Internet Protocol (IP) addresses used in this document are not intended to be actual addresses. Any examples, command display output, and figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses in illustrative content is unintentional and coincidental.

© 2008 Cisco Systems, Inc. All rights reserved.

