



# Release Notes for Cisco Network Order Manager Release 1.3

---

## August 2001

These release notes provide information about Cisco Network Order Manager (CNOM) Release 1.3, which runs on the Cisco Element Management Framework (CEMF).



### Note

---

CNOM Release 1.3 is designed to run with SCM 2.2(2). The release has not been fully tested with the Cisco DSL Manager (CDM) and the Cisco WAN Manager (CWM).

---

Use these release notes in conjunction with the *Release Notes for Cisco Element Management Framework Version 3.0.4* and the release notes for element managers that are installed with CNOM Release 1.3.

## Contents

These release notes contain the following sections.

- [CNOM Release 1.3 Features, page 2](#)
- [Installing the Software, page 2](#)
- [System Requirements, page 3](#)
- [Limitations and Restrictions, page 3](#)
- [CNOM Release 1.3 Open Caveats, page 4](#)
- [Closed Caveats, page 5](#)
- [Obtaining Documentation, page 10](#)
- [Obtaining Technical Assistance, page 11](#)



---

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

Copyright © 2001. Cisco Systems, Inc. All rights reserved.

# CNOM Release 1.3 Features

Following is a list of new features provided by CNOM Release 1.3:

- The architecture for storing connection objects (`connectionObjectsStore`) now allows faster deployment and better system performance. In addition, there is a new command for moving existing connections onto the new object store:
 

```
./populateConnectionHash
```
- CNOM enables you to hide connection objects in CNOM views to improve system performance. The `MakeConnectionInvisible` policy hides a connection object, and the `MakeConnectionVisible` policy makes a hidden connection visible again. In addition, CNOM connect scripts now include a `-hide` option that you can use to hide the connection object created by the script.
- The Add PVC to SubtendPVC view option causes CNOM to add PVC objects to the *SubtendPVC* view when they are created. By default, this option is turned off to improve system performance. You can manage this feature through the `CDMDmmCtrlrUserData.ini` file, or through the attribute `CDMDmmCtrlr:DDMWorkOrder.addToSubtendPVC`.
- The following two new commands enable you to suspend CNOM operation during a CEMF backup, and then resume operation after the backup:
 

```
./suspendOperation
./resumeOperation
```
- Load balancing is now possible between two Cisco 6400 Universal Access Concentrators (UACs). To accommodate this feature, several new scripts were added to invoke policies for managing multiple inter-machine tie (IMT) links: `set-IMT`, `unset-IMT`, `setactive-IMT`, and `getinfo-IMT`.
- An installation script was added to make CNOM installation and upgrade easier. You can now perform an installation or upgrade from the same directory. Previously, it was necessary to change to several directories to perform the procedure.
- To improve system performance during *bulk deployment* (which is the deployment of multiple objects), all CNOM policies use the primitive `ObjectsDeployPrimitive`, which deploys multiple objects in a single call rather than one at a time.
 

For connection objects, which must be deployed individually, CNOM uses the primitive `CreateConnectionObject` to create the connection object in the *connectionObjectsStore* view.
- Before processing a work order, CNOM checks to make sure that no other work orders are being run on the specified connection object. CNOM returns an error message if another work order is already being run on this connection object.
- CNOM allows the same state name to be used in different policies. Previously, state names were required to be unique across all policies. Now, CNOM checks for unique state names only within each policy.

For more information about these changes, see the *Cisco Network Order Manager Solutions Guide*.

## Installing the Software

The CNOM installation and upgrade procedures have been simplified. Beginning with CNOM Release 1.3, you no longer need to install several separate software packages. Instead, you run a single command that invokes an installation procedure which automatically installs all of the packages. See the *Cisco Network Order Manager Solution Guide* for instructions on installing or upgrading CNOM software.

# System Requirements

CNOM Release 1.3 runs with the following Cisco element management systems:

- Cisco Service Connection Manager Release 2.2(2)
- Cisco DSL Manager Release 3.3.3

To run CNOM Release 1.3, the following CEMF release and patches must be installed:

- CEMF Release 3.0.4
- SCM requires CEMF Patches 14 and 14.2
- CDM requires CEMF Patches 14 and 14.1

To calculate the system requirements for the element managers being used with CNOM:

1. Find the recommended system configuration for each of the element managers that will be running on the system as specified in its documentation.
2. Add the memory, disk, swap, and processor requirements specified for each element manager for the number of nodes being managed by that element manager.

## Limitations and Restrictions

The following sections describe important limitations and restrictions that you should review before you use CNOM Release 1.3.

### Using an Installation Directory Other Than /opt/cemf

Many of the scripts supplied with CNOM Release 1.3 do not work if the product is installed in a directory other than `/opt/cemf`.

As a workaround, create a soft link between the actual installation directory and `/opt/cemf`. Use the following command:

```
% ln -s <actual_cemf_installation_dir> /opt/cemf
```

### Upgrade Considerations

Instructions for upgrading CNOM software are included in Chapter 2 of the *Cisco Network Order Manager Solution Guide*. As you perform the upgrade, consider the following:

- As part of the upgrade to SCM Release 2.2(2), you must run the following script to migrate existing inter-machine tie (IMT) connections:

```
./IMTLinkDM
```

- Be sure to migrate existing connections to the new connection object store by running the following script:

```
./populateConnectionHash
```

- You must check the compatibility of existing CNOM policies to make sure they can run with the new release.

## Work Order Processing During CEMF Backup or Restore

Work orders cannot be processed during a CEMF backup or restore. Previously, you had to stop CNOM before performing either. Now, you can use the CNOM Release 1.3 commands `./suspendOperation` and `./resumeOperation` to suspend CNOM processing during a backup or restore, and resume CNOM operation when the process is complete. See the *Cisco Network Order Manager Solution Guide* for more information.

## End-to-End Connections

CNOM Release 1.3 does not support end-to-end connections between different devices. This means that you cannot use CNOM to set up a connection between a Cisco 6400 UAC and a DSLAM, or between two Cisco 6400 UACs through a WAN. You can, however, use CNOM to set up an end-to-end connection between subtended DSLAMs, or between multiple UACs in a local network.

## CNOM Release 1.3 Open Caveats

Table 1 lists the open caveats for CNOM Release 1.3. For caveats affecting CNOM, but not caused by CNOM, the Caveat column lists the component causing the problem.

**Table 1** *CNOM Release 1.3 Caveats*

Caveat	Description
CSCdt23620 (CDM)	When a DSLAM (chassis) with valid connections is decommissioned and then recommissioned, connection objects in the CDM GUI and in the Object Configuration window remain in the decommissioned state.  <b>Workaround:</b> After you recommission the DSLAM, manually commission the connection objects.
CSCdt28067 (CEMF)	The CNOM upgrade procedure displays error messages even though the upgrade is successful.  <b>Workaround:</b> Ignore the error messages.
CSCdt40751 (CEMF)	CNOM does not check the values of ATM QoS and WAN ATM QoS profile parameters; therefore, it is possible to create profiles with invalid values.  <b>Workaround:</b> Be sure to specify valid values for profile parameters. Note that the WAN ATM QoS Profile window now lists valid ranges for parameters.
CSCdt57627	If you use the Cisco 6400 SCM to delete a connection from the <i>connectionObjects</i> view and then run the <code>restoreSCMATMConnection</code> policy, the policy fails but it does create some connection objects in the <i>connectionObjects</i> view.  <b>Workaround:</b> None.

Table 1 CNOM Release 1.3 Caveats

Caveat	Description
CSCdt59728 (CEMF)	<p>If you use <code>cemf load -skipportcheck</code> to upgrade a CEMF package whose name contains a package version, this upgrades the package, but does not change the package name.</p> <p><b>Workaround:</b> After you upgrade the package, use the <code>cemf install -s</code> command to display the current version number of the upgraded package.</p>
CSCdt66426	<p>When you use the <code>connect_atm</code> script with <code>-syslog</code> option to create an ATM connection, only part of the work order for the connection is stored in the syslog file. This is because the record in the syslog file can only hold up to 1037 characters, and the work order is larger than that.</p> <p><b>Workaround:</b> None</p>

## Closed Caveats

The following sections list problems resolved in CNOM Release 1.3 and in earlier releases.

### Caveats Closed in CNOM Release 1.3

Following is a list of problems fixed in CNOM Release 1.3.

#### CSCds45723 (CEMF)

It no longer takes more time for the Cisco 6400 SCM Connection Policy to create connections as the number of connections increases.

#### CSCdt20738

Soft PVCs (SPVCs) created by CNOM no longer fail to appear in the *SubtendPVC* view.

#### CSCdt23745 (CDM)

The `connect_cdm` script no longer fails to create an SPVC when you use the `-auto` option.

#### CSCdt32097

You no longer need to be logged in as root the first time you create a connection in CNOM. You can now create the first connection and subsequent connections from a regular (non-root) login.

#### CSCdt46308

If you use the CDM Upload Configuration feature to restore connections in CDM, and you then use the `restoreCDMConnection` policy to restore those same connections, the names of the connections in CDM views do not match the names in the CNOM *connectionObjects* view.

#### CSCdt58220

The `set_IMT` script no longer fails when you run it multiple times.

#### CSCdt80497 (CDM)

A provisioning failure no longer causes a misleading error message to be displayed.

**CSCdt82762**

After you install or upgrade CNOM, the system no longer displays an incorrect component version for the DDMG package.

**CSCdt95685**

When you create an SPVC using CNOM, the SPVC object no longer fails to appear under the top chassis trunk port in the CDM GUI.

**CSCdu16411**

When there are more than 2000 connections, it no longer takes more than 1 minute to delete a single connection.

## Caveats Closed in CNOM Release 1.2

Following is a list of problems fixed in CNOM Release 1.2.

**CSCdt13416**

When you provision SPVC connections with CDM Release 3.3, CNOM no longer uses an incorrect Network Service Access Point (NSAP) address and the connection no longer fails to complete in the node.

**CSCdt17020**

The `disconnect_cdm` script no longer fails to remove the connection from the *ComponentManaged* view.

**CSCdt24882**

The CNOM command `connect_cdm` no longer fails to create the connection and the error message is no longer confusing.

**CSCdt31762**

CDM no longer crashes when you run two CNOM scripts at the same time.

**CSCdt34074**

The system no longer crashes when you run two CNOM scripts that contain **daSet** at the same time.

**CSCdt41698**

Previously, you could not determine the valid values for parameters in the WAN ATM QoS profile. This information was added to Table E-1 in the *Cisco Network Order Manager Solution Guide*.

**CSCdt45220**

The *Cisco Network Order Manager Solution Guide* now contains instructions on how to access CNOM man pages. Those instructions appear in Chapter 2.

**CSCdt45521**

Previously, to configure CNOM to send messages to the syslog file, it was necessary to edit the `/etc/syslog.conf` file and restart the `syslogd` daemon. Now, however, the syslog facility is turned off by default.

**CSCdt47777**

Previously, when you updated a class configuration file in the directory `/opt/cemf/config/CNOMSync/objectClasses`, you had to run `updateCNOMSync` two times for the changes to take effect. This is no longer necessary. The changes take effect the first time you run `updateCNOMSync`.

**CSCdt47998**

The CNOM `connect_scm` script no longer fails to create the connection.

**CSCdt49298**

Previously, if you upgraded CNOM or CDM without first removing the Subtend package, the system crashed when you attempted to reset CEMF. The *Cisco Network Order Manager Solution Guide* now indicates that the subtend package must be removed before you attempt an upgrade.

**CSCdt49331**

Previously, the *Cisco Network Order Manager Solution Guide* did not mention that the commands `cemf install -r` and `cemf -install -s` do not display package information for CNOMSync. This information was added to the guide.

**CSCdt49370**

Running the `disconnect_atm` script no longer fails to remove all of the connection objects from the Map Viewer window in the GUI.

**CSCdt49420**

When you try to create an ATM connection with existing VPI/VCI values, the system no longer fails to display an error message.

**CSCdt49819**

The `SyncLog.log` file no longer fails to record information about ATM connections that are created or deleted through the SCM GUI.

**CSCdt49957**

When you use CDM to create a subscriber connection, CNOMSync no longer fails to record the creation of the corresponding PVC object.

**CSCdt50450**

When you use the GUI to delete a connection object from the *connectionObjects* view, the system no longer fails to record a message to the `SyncLog.log` file.

**CSCdt55353**

The `disconnect_atm` script no longer takes 4 minutes to disconnect a single ATM connection, and it no longer fails to remove all GUI subscriber objects in the *Cisco6400Subscriber* view.

**CSCdt63918**

The `getConnectionData` script no longer displays connection data for a failed connection.

**CSCdt63991**

CEMF no longer fails to restart after you install the CNOM packages DDMG, DDMGen, CNOMSync, and C6400DMM, and reset the database.

**CSCdt64171**

When you use the `connect_atm` script `-noSave` option, the system no longer fails to write a record to the `connectionsLog.log` file.

**CSCdt66233**

The system no longer denies permission to run an executable file created by the `getResoreWO` script.

**CSCdt69184**

It is no longer necessary to run Discover Subtends on a single chassis to create a connection.

**CSCdt74312**

Loading CNOM objects and views into the `connectionObjects` view no longer causes a CNOMsync core dump.

**CSCdt74382**

The system no longer displays an incorrect package version when you run `cemf install -s` after you install or upgrade the CNOMSync package.

**CSCdt75633**

The `connect_atm` script no longer fails to create an ATM connection in a single Cisco 6400 UAC chassis.

**CSCdt76719**

When you run the `restoreSCMATMConnection` policy in an environment that contains multiple Cisco 6400 UACs, the connection objects are no longer restored under the egress port of the CLEC chassis. They are restored under the tie port of the CLEC chassis, which is the proper location.

**CSCdt80507**

If a Connection template is applied to one or more connections, it is no longer possible to delete the template after you run the `restoreSCMATMConnection` policy.

**CSCdu08898**

The *Cisco Network Order Manager Solution Guide* now indicates that matching names are required for DSL technology profiles and their corresponding ATM QoS profiles.

**CSCdu16278**

It no longer takes more time to start up CEMF when several connections exist in the configuration.

**CSCdu21134**

The `create_QoS_profile` script no longer fails to create an ATM QoS profile.

**CSCdu21196**

When you run the `set_IMT` script, the system no longer fails to log the work order in the `connectionsLog.log` file.

**CSCdu21249**

The script `delete_QoS_profile` no longer fails to delete an ATM QoS profile that was created through the SCM GUI.



**CSCdu23155**

The `disconnectSCM` script no longer contains error statements in its success message.

**CSCdu44835**

Previously, the `disconnect_atm` script removed a connection in CEMF but failed to remove the connection on the device if there were communication problems between CEMF and the device. Even though the connection still existed on the device (but not in the CEMF database), the script returned a success message.

The `disconnect_atm` script has been fixed. Now, if communication problems exist, and the system cannot access the device to remove the connection, the script returns an error message and does not remove the connection from the CEMF database.

## Fixed Caveats from Previous CNOM Releases

Following is a list of CNOM caveats fixed in previous CNOM releases.

**CSCdt09301**

An attribute format change for NSAP address in CDM no longer causes an incorrect value to be used in CDM SPVC creation. (Fixed in Release 1.0.5)

**CSCdr74461**

Connection failure in CDM no longer causes panic in `CDMDMMCtrlr` process due to a message buffer being too small. (Fixed in Release 1.0.4)

**CSCds76503 (Complete fix)**

After you execute `set_line_id` several times, a CEMF backup no longer pauses indefinitely. (Fixed in Release 1.0.3)

**CSCds76494**

When you run the bulk cdm connection script, memory leaks no longer occur on the CDM NOA module. (Fixed in Release 1.0.2)

**CSCds21224**

The `Bulk_disconnect_atm` script no longer deletes objects too slowly. The desired performance numbers are now set for disconnects. (Fixed in Release 1.0.1)

# Obtaining Documentation

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

## World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following sites:

- <http://www.cisco.com>
- <http://www-china.cisco.com>
- <http://www-europe.cisco.com>

## Documentation CD-ROM

Cisco documentation and additional literature are available in a CD-ROM package, which ships with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or through an annual subscription.

## Ordering Documentation

Cisco documentation is available in the following ways:

- Registered Cisco Direct Customers can order Cisco Product documentation from the Networking Products MarketPlace.  
[http://www.cisco.com/cgi-bin/order/order\\_root.pl](http://www.cisco.com/cgi-bin/order/order_root.pl)
- Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store.  
<http://www.cisco.com/go/subscription>
- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, in North America, by calling 800 553-NETS(6387).

## Documentation Feedback

If you are reading Cisco product documentation on the World Wide Web, you can submit technical comments electronically. Click **Feedback** in the toolbar and select **Documentation**. After you complete the form, click **Submit** to send it to Cisco.

You can e-mail your comments to [bug-doc@cisco.com](mailto:bug-doc@cisco.com).

To submit your comments by mail, use the following address:

Attn Document Resource Connection  
Cisco Systems, Inc.  
170 West Tasman Drive  
San Jose, CA 95134-9883

We appreciate your comments.

# Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools. For Cisco.com registered users, additional troubleshooting tools are available from the TAC website.

## Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information and resources at anytime, from anywhere in the world. This highly integrated Internet application is a powerful, easy-to-use tool for doing business with Cisco.

Cisco.com provides a broad range of features and services to help customers and partners streamline business processes and improve productivity. Through Cisco.com, you can find information about Cisco and our networking solutions, services, and programs. In addition, you can resolve technical issues with online technical support, download and test software packages, and order Cisco learning materials and merchandise. Valuable online skill assessment, training, and certification programs are also available.

Customers and partners can self-register on Cisco.com to obtain additional personalized information and services. Registered users can order products, check on the status of an order, access technical support, and view benefits specific to their relationships with Cisco.

To access Cisco.com, go to the following website:

<http://www.cisco.com>

## Technical Assistance Center

The Cisco TAC website is available to all customers who need technical assistance with a Cisco product or technology that is under warranty or covered by a maintenance contract.

## Contacting TAC by Using the Cisco TAC Website

If you have a priority level 3 (P3) or priority level 4 (P4) problem, contact TAC by going to the TAC website:

<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.

AccessPath, AtmDirector, Browse with Me, CCIP, CCSI, CD-PAC, *CiscoLink*, the Cisco *Powered* Network logo, Cisco Systems Networking Academy, the Cisco Systems Networking Academy logo, Fast Step, Follow Me Browsing, FormShare, FrameShare, GigaStack, IGX, Internet Quotient, IP/VC, iQ Breakthrough, iQ Expertise, iQ FastTrack, the iQ Logo, iQ Net Readiness Scorecard, MGX, the Networkers logo, *Packet*, RateMUX, ScriptBuilder, ScriptShare, SlideCast, SMARTnet, TransPath, Unity, Voice LAN, Wavelength Router, and WebViewer are trademarks of Cisco Systems, Inc.; Changing the Way We Work, Live, Play, and Learn, Discover All That's Possible, and Empowering the Internet Generation, are service marks of Cisco Systems, Inc.; and Aironet, ASIST, BPX, Catalyst, CCDA, CCDP, CCIE, CCNA, CCNP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS, the Cisco IOS logo, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Enterprise/Solver, EtherChannel, EtherSwitch, FastHub, FastSwitch, IOS, IP/TV, LightStream, MICA, Network Registrar, PIX, Post-Routing, Pre-Routing, Registrar, StrataView Plus, Stratm, SwitchProbe, TeleRouter, and VCO are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and certain other countries.

All other trademarks mentioned in this document or Web site 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. (0106R)

Copyright ©2001, Cisco Systems, Inc.  
All rights reserved.