Release Notes for Catalyst 6500 Series and Cisco 7600 Series Internet Router CEF720 Module ROMMON Software

Current Release: 12.2(18r)S1—May 28, 2004

This publication describes how to upgrade the ROMMON on your Catalyst 6500 series or Cisco 7600 series Internet Router CEF720 modules.

The following CEF720 modules are supported by this ROMMON image:

- WS-X6748-GE-TX
- WS-X6724-SFP
- WS-X6748-SFP
- WS-X6704-10GE
- WS-X6708-10G-3C and WS-X6708-10G-3CXL
- WS-X6716-10G-3C and WS-X6716-10G-3CXL

Tip You should consider the 12.2(18r)S1 ROMMON software upgrade if you need the bug fixes documented in the "Caveats" section on page 3.

With this procedure, you can upgrade the ROMMON image similar to the way that you upgrade the Cisco IOS operating system software.

ROMMON software release 12.2(18r)S1 is supported in Catalyst 6500 series and Cisco 7600 series systems that are running Cisco IOS software on the Supervisor Engine 720.

Contents

This publication consists of these sections:

System Software Requirements

The CEF720 module ROMMON software upgrade requires Cisco IOS Release 12.1(18)SXE on the supervisor engine and MSFC.

Software Images

Table 1 lists the software releases for the dCEF module ROMMON software.

Table 1   Upgradable Modules

CEF720 Module ROMMON Software Releases	Filenames
12.2(18r)S1 upgradable module ROMMON image	c2lc-rm2.srec.122-18r.S1

ROMMON Image Overview

The CEF720 module ROMMON consists of two modules:

- A resident module that is not changed during the upgrade procedure.
- An upgradable module that is updated during the upgrade procedure. This is the only module that you will download from Cisco.com.

New and Changed Information

CEF720 module ROMMON software release 12.2(18r)S1 contains bug fixes; no new feature support is added.

Caveats

The following section contains resolved caveat information:

Resolved Caveats in ROMMON Software Release 12.2(18r)S1

- ROMMON is not able to boot a compressed offline diagnostics image from bootflash. This problem is resolved in ROMMON software release 12.2(18r)S1. (CSCdy65817)

- After an RPR+ switchover, some modules to not come back online. This problem is resolved in ROMMON software release 12.2(18r)S1. (CSCeb23191)

Upgrading the CEF720 Module ROMMON

Note Before performing this procedure, you must download the new ROMMON image from Cisco.com. The download procedure is the same as downloading Catalyst software images.

To upgrade the ROMMON version on your CEF720 module, perform these steps (in this example, the module is in slot 4):

Step 1 Check the active ROMMON information:

```
Router# show rom-monitor slot 4

    Region F1:APPROVED, preferred
    Region F2:INVALID
    Currently running ROMMON from F1 region
Router#
```

The display indicates that the active ROMMON is running in region1.

Step 2 Program the new ROMMON image to the Flash device on the module (in this example, the image is stored in the route processor bootflash):

```
Router# upgrade rom-monitor slot 4 file bootflash:c2lc-rm2.srec.122-18r.S1
Copying bootflash:c2lc-rm2.srec.122-18r.S1 onto bootflash of dfc#4 CCCCCCCCC
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
CCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
Router#
19:40:08: DFC4: ROMMON image upgrade in progress
19:40:08: DFC4: Erasing flash
19:40:11: DFC4: Programming flash
19:40:13: DFC4: Verifying new image
19:40:13: DFC4: ROMMON image upgrade complete
 The card must be reset for this to take effect

Router#
```

Step 3 Check the new active ROMMON information:

```
Router# show rom-monitor slot 4
   Region F1:APPROVED
   Region F2:FIRST_RUN, preferred
   Currently running ROMMON from F1 region
Router#
```

Step 4 Reload the module for the change to take effect:

```
Router# hw-module module 4 reset
Proceed with reload of module? [confirm]
% reset issued for module 4

<output truncated>
```

Step 5 After the system comes up, check the ROMMON information again:

```
Router# show rom-monitor slot 4
   Region F1:APPROVED
   Region F2:APPROVED, preferred
   Currently running ROMMON from F2 region
Router#
```

The "Region2" field should show "APPROVED, preferred." The ROMMON stored in the Region2 is now the active ROMMON.

Storing More Than One ROMMON Image

The procedure in this section is optional and should be used only if you have multiple versions of the upgraded ROMMON image stored on the module. These procedures describe how to select a particular ROMMON image for booting and how to disqualify a particular ROMMON region.

Selecting a Stored ROMMON Image

There are three regions (including the Gold region) where versions of the ROMMON image can be stored. You can use the **upgrade rom-monitor slot preference** command to switch between regions.

The ROMMON software upgrade feature allows you to have two upgraded ROMMON images (one in region F1, the second in region F2) in addition to the "Gold" ROMMON stored on the one-time programmable (OTP) EPROM section of the ROMMON. Use the **upgrade rom-monitor slot preference** command to select which ROMMON will be the preferred ROMMON the next time the system is booted. You can change the preference as often as you like. The changes do not take effect until you reset the system.

To select a particular ROMMON image, perform these steps:

Step 1 Change the ROMMON preference:

```
Router# show rom-monitor slot 4
Region F1:FIRST_RUN
Region F2:FIRST_RUN, preferred
Currently running ROMMON from F2 region
Router# upgrade rom-monitor slot 4 preference region1

You are about to mark F1 region of DFC ROMMON in slot 4 as the boot preference region,
proceed[n]? y
Router#
```

Step 2 Reload the module for the change to take effect:

```
Router# hw-module module 4 reset
Proceed with reload of module? [confirm]
% reset issued for module 4

<output truncated>
```

Step 3 Verify the change:

```
Router# show rom-monitor slot 4
Region F1:APPROVED, preferred
Region F2:APPROVED
Currently running ROMMON from F1 region
```

You can also disqualify a specific region of ROMMON and use the other region or go back to using the "Gold" ROMMON stored in the OTP EPROM section by using the **upgrade rom-monitor slot invalidate** command.

To disqualify a specific ROMMON region, perform these steps:

Step 1 Disqualify a specific ROMMON region:

```
Router# show rom-monitor slot 4
Region F1:FIRST_RUN
Region F2:FIRST_RUN, preferred
Currently running ROMMON from F2 region

Router# upgrade rom-monitor slot 4 invalidate region2

You are about to mark F2 region of DFC ROMMON in slot 4 as an invalid region,
proceed[n]? y
Router#
```

Step 2 Reload the DFC for the change to take effect:

```
Router# hw-module module 4 reset
Proceed with reload? [confirm]

<output truncated>
```

Step 3 Verify the change:

```
Router# show rom-monitor slot 4
Region F1:FIRST_RUN
Region F2:INVALID
Currently running ROMMON from S (Gold) region
```

Additional Documentation

The following Cisco IOS software documents are available for the Catalyst 6500 series switches:

- *Catalyst 6500 Series Switch Cisco IOS Software Configuration Guide*
- *Catalyst 6500 Series Switch Cisco IOS Command Reference*
- *Catalyst 6500 Series Switch Cisco IOS System Message Guide*

The following Cisco IOS software documents are available for the Cisco 7600 series routers:

- *Cisco 7600 Series Switch Cisco IOS Software Configuration Guide*
- *Cisco 7600 Series Switch Cisco IOS Command Reference*
- *Cisco 7600 Series Switch Cisco IOS System Message Guide*

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, 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

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS Version 2.0.

This document is to be used in conjunction with the *Catalyst 6500 Series Cisco IOS Software Configuration Guide* , the *Catalyst 6500 Series Cisco IOS Command Referenc,* the *Cisco 7600 Series Router Cisco IOS Software Configuration Guide* and the *Cisco 7600 Series Router Cisco IOS Command Reference e* publications.