



# Cisco ROM Monitor Upgrade Guide for the PRE3

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This document contains procedures for a Cisco ROM Monitor software download.

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## Compatibility Requirements

ROMMON Version 1.0.1 works with Cisco IOS software Releases 12.2(31)SB12, 12.2(33)SB, and later.

## Supported Platforms

ROMMON Version 1.0.1 is supported on Cisco 10000 series router.

## Caveats

This section documents the caveats that can be resolved by installing ROMMON Version 1.0.1.

## Resolved Caveats

The following caveats can be resolved by upgrading to ROMMON Version 1.0.1:

### **CSCsj96150**

The ROMMON banner required updating from 2006 to 2007. This has been fixed.



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**CSCsk56558**

ROMMON used the first executable image in boot flash memory as a boot loader when the **boot xyz** command was executed, where *xyz* is not a known file system. However, if the first executable image is a full Cisco IOS software image, the boot failed. This has been fixed.

**CSCsk56597**

When the Cisco IOS image was reloaded, the Resetting string became truncated. This has been fixed.

## Performing a Performance Routing Engine 3 Upgrade

The following sections explain how to perform a Performance Routing Engine 3 (PRE3) ROMMON and EBOOT image upgrade:

- [Upgrading the PRE3 ROMMON Image](#)
- [Upgrading the EBOOT Image](#)

### Upgrading the PRE3 ROMMON Image

Upgrade your PRE3 board ROM (ROM1 and ROM2) to the new ROMMON MCE\_RM.srec.1.1 firmware, which you can download from:

<http://www.cisco.com/cgi-bin/tablebuild.pl/a11ce9185cf1bdcabecf1cb9f2bac23b>

The following steps show how to upgrade the PRE3 ROMMON:

**Step 1** If the ROMMON image is running on the router, boot the eboot image from the boot flash memory. However, if either Cisco IOS or eboot images are running on the router, you can enter the **rom** command to see which ROMMON is being used. If rom0 (golden rom) is being used, you can upgrade the router to either the rom1 or rom2 image. If either of the rom1 or rom2 image is being used, you can upgrade the one *not* being used currently. In the following example, rom0 is being used.

```
router# rom
ROM IMAGE  STATUS
---  -----  -----
ROM G (Golden ROM) DEFAULT & IN USE
ROM 1 (Field Upgradable) FIRST_RUN
ROM 2 (Field Upgradable) FIRST_RUN
In ROM 0, ROMMON version:
System Bootstrap, Version 12.2(20060320:155403) [fyang-rom_1_0 101], DEVELOPMENT SOFTWARE
Copyright (c) 1994-2005 by cisco Systems, Inc.
In ROM 1, ROMMON not yet completely verified. The version info is not available.
In ROM 2, ROMMON not yet completely verified. The version info is not available.
```

**Step 2** To upgrade rom1, enter **upgrade rom rom1 file tftp://<tftp\_server\_ip>/<tftp\_dir>/MCE\_RM.srec.1.1**. You can also copy the ROMMON image to the boot flash memory and upgrade the image from boot flash by using the **upgrade rom rom1 file bootflash:MCE\_RM.srec.1.1** command.

**Step 3** During the upgrade, enter **yes** to all questions, as shown in the following example:

```
router# upgrade rom rom1 file tftp://<tftp_server_ip>/<tftp_dir>/MCE_RM.srec.1.1
Loading pre3/images/MCE_RM.srec.1.1 from 223.255.254.254 (via
FastEthernet0/0/0):
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
```

```

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
[OK - 882211 bytes]
ROM 1 update in progress
Erasing (this may take a while)...
Programming...
CCCCCCCCCCCC
Do you want to verify this image (may take a few minutes)? [yes/no]:
yes Verifying ROM 1
Reading from ROM 1...vvvvvvvDone
Comparing with the source file...Passed
Set this ROMMON image as the default (will take effect on next reload)?
[yes/no]: yes

```

**Step 4** Reload the router.

**Step 5** To complete the ROMMON upgrade, boot the eboot and Cisco IOS images *again*. When the eboot and Cisco IOS images boot successfully, the new ROMMON becomes the default. To upgrade another ROMMON, go to Step 2 and repeat the procedure.

```

router# rom
ROM          IMAGE          STATUS
---          -
ROM G (Golden ROM)
ROM 1 (Field Upgradable) APPROVED DEFAULT & IN USE
ROM 2 (Field Upgradable) APPROVED
In ROM G, ROMMON version is inaccessible when executing from either ROM 1 or ROM 2.
In ROM 1, ROMMON version:
System Bootstrap, Version 12.2(20060428:204330) [fyang-rom-1_1 102], DEVELOPMENT SOFTWARE
Copyright (c) 1994-2006 by cisco Systems, Inc.
In ROM 2, ROMMON version:
System Bootstrap, Version 12.2(20060428:204330) [fyang-rom-1_1 102], DEVELOPMENT SOFTWARE
Copyright (c) 1994-2006 by cisco Systems, Inc.

```

## Upgrading the EBOOT Image

To obtain the new eboot image, copy and paste the following link in your Web browser, and then download the image:

[http://tools.cisco.com/support/downloads/go/IPCheck.x?defAdv=N&sftAdv=N&filename=c10k3-eboot-mz.122-34.SB.bin&advUrl=null&defInd=N&mdfid=268438016&sftType=IOS+Boot+Images&optPlat=&nodecount=2&relVer=12.2.34-SB&md5=20fc8722108dfd916f2a50f0226d6b45&modifmdfid=281044648&iname=Cisco+10000+Performance+Routing+Engine+3+\(PRE3\)&hybrid=Y&imst=N&modelName=Cisco+10008+Router&treeMdfid=268437899&treeName=Routers&edesignator=ED&lr=Y&nodecount=2](http://tools.cisco.com/support/downloads/go/IPCheck.x?defAdv=N&sftAdv=N&filename=c10k3-eboot-mz.122-34.SB.bin&advUrl=null&defInd=N&mdfid=268438016&sftType=IOS+Boot+Images&optPlat=&nodecount=2&relVer=12.2.34-SB&md5=20fc8722108dfd916f2a50f0226d6b45&modifmdfid=281044648&iname=Cisco+10000+Performance+Routing+Engine+3+(PRE3)&hybrid=Y&imst=N&modelName=Cisco+10008+Router&treeMdfid=268437899&treeName=Routers&edesignator=ED&lr=Y&nodecount=2)

The following steps show the upgrade procedure:

**Step 1** Ensure that the new eboot image is the only eboot image in boot flash memory. After you upload the latest image with a new filename, delete the current eboot image. Or, you can also overwrite the current eboot image during the **copy tftp bootflash** command using the same filename, as shown in the following example:

```

router# dir bootflash:
Directory of bootflash:/
1 -rw- 3291512 May 12 2006 11:52:28 -05:00 c10k3-eboot-mz
127913984 bytes total (74493952 bytes free)

```

```

router# copy tftp bootflash:
Address or name of remote host []? <tftp_server_ip_address>
Source filename []? <tftp_dir>/c10k3-eboot-mz.20060524
Destination filename [c10k3-eboot-mz.20060524]? c10k3-eboot-mz
%Warning:There is a file already existing with this name
Do you want to over write? [confirm]y
Accessing tftp://<tftp_server_ip_address>/<tftp_dir>/c10k3-ebootmz.
20060524...
Loading pre3/images/c10k3-eboot-mz.20060524 from 223.255.254.254 (via
FastEthernet0/0/0): !!!!!!!!!!!!!!!!
[OK - 3294840 bytes]
3294840 bytes copied in 8.996 secs (366256 bytes/sec)

```

**Step 2** To confirm that the new eboot works, configure the router for a tftp boot as shown in the following example:

```

router# sho run | incl boot
boot-start-marker
boot system bootflash:c10k3-p11-mz.122-31.4.32.SB
boot-end-marker

router# conf t
Enter configuration commands, one per line. End with CNTL/Z.
router(config)# no boot system bootflash:c10k3-p11-mz.122-31.4.32.SB
router(config)# boot system tftp pre3/images/c10k3-p11-mz.122-31.4.32.SB
router(config)# end
router# wri
Building configuration...
[OK]
router# reload
Proceed with reload? [confirm]
Resetting .....
System Bootstrap, Version 12.2(20060428:204330) [fyang-rom-1_1 102],
DEVELOPMENT SOFTWARE
Copyright (c) 1994-2006 by cisco Systems, Inc.
Reset Reason Register = RESET_REASON_SW_RESET_REG (0x02)
C10000 platform with 2097152 Kbytes of main memory
Initializing ATA monitor library...
Self decompressing the image : ##### [OK]
Currently running ROMMON from ROM 0
Packet Engine initialization complete.
%SYS-6-CLOCKUPDATE: System clock has been updated from 15:56:12 UTC Wed
May 17 2006 to 10:56:12 EST Wed May 17 2006, configured from console by
console.
Loading pre3/images/c10k3-p11-mz.122-31.4.32.SB from 223.255.254.254
(via FastEthernet0/0/0): !!!!!!!!!!!
[OK - 24566568 bytes]

```

## 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.

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