



ROMMON Release Notes for WS-X45-SUP6-E and WS-C4900M

Current Release: 12.2(44r)SG5—October 13, 2009

This publication describes how to download the new ROMMON image from Cisco.com and then upgrade the ROMMON on WS-X45-SUP6-E and WS-C4900M.

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ROMMON Image Overview

This ROMMON image consists of a new ROMMON software image and a new FPGA image. Both are installed by following the ROMMON upgrade procedure listed below. These images are only accepted on WS-X45-SUP6-E and WS-C4900M. They are the same versions that currently ship on the WS-X45-SUP6-LE.

Caveats

12.2(44r)SG5

The following caveat is resolved in this release:

- While you are rebooting a supervisor engine or when your switch's power is lost due to power failure, either all ROMMON variables are cleared or junk characters are observed on the screen.

If you type the set command at a ROMMON prompt you will only see 2 or 3 ROMMON variables. If your switch's baud rate differs from 9600, you observe junk characters.



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Workaround: Re-set all the ROMMON variables.

CSCsu05453

12.2(44r)SG3

The following caveats are resolved in this release:

- During and after booting a switch, the following compact flash card error message appears:

"Error in reading FlashDriverCompact - is it inserted correctly?
Please eject the card and re-insert it properly."

While the message displays, you cannot enter the **show slot0:** and **format slot0:** commands.

Workaround: Remove and reinsert the compact flash card.

The error message reappears when you repower the switch.

(CSCsu36751)

- In rare instances, an active Supervisor Engine 6-E reloads when you insert the standby supervisor engine.

Workaround: None. (CSCsu73446)

Guidelines for Upgrading the ROMMON



Caution

If your supervisor engine is shipped with a newer version of ROMMON then do not downgrade! The new ROMMON will have board settings based on a hardware revision of components, and old settings will not work.

Upgrading the Supervisor Engine ROMMON



Caution

To avoid actions that might make your system unable to boot, read this entire section before starting the upgrade.



Note

The examples in this section use the programmable read-only memory (PROM) upgrade version 12.2(44r)SG5 and Cisco IOS Release 12.2(50)SG. For other releases, replace the ROMMON release and Cisco IOS software release with the appropriate releases and filenames. This document describes the procedure for a single supervisor system. You must perform the process on each supervisor in a dual supervisor system.

Follow this procedure to upgrade your supervisor engine ROMMON:

Step 1 Directly connect a serial cable to the console port of the supervisor engine.



Note This section assumes that the console baud rate is set to 9600 (default). If you want to use a different baud rate, change the configuration register value for your switch.

Step 2 Download the cat4500-e-ios-promupgrade-122_44r_SG5 program from Cisco.com, and place it on a TFTP server in a directory that is accessible from the switch that is upgraded.

The cat4500-e-ios-promupgrade-122_44r_SG5 programs are available on Cisco.com at the same location from which you download Catalyst 4500 system images.

Step 3 Use the **dir bootflash:** command to ensure that sufficient space exists in Flash memory to store the PROM upgrade image. If you are using a CompactFlash card, replace **bootflash:** with **slot0:**



Note Because of CSCsu36751, you should use bootflash for this upgrade if your current ROMMON version is prior to 12.2(44r)SG3. Else, you might need to reseal the compact flash after rebooting.

Step 4 Download the cat4500-e-ios-promupgrade-122_44r_SG5 program into Flash memory using the **copy tftp** command.

The following example shows how to download the PROM upgrade image cat4500-e-ios-promupgrade-122_44r_SG5 from the remote host 172.20.58.78 to bootflash:

```
Switch# copy tftp: bootflash:
Address or name of remote host [172.20.58.78]?
Source filename [cat4500-e-ios-promupgrade-122_44r_SG5]?
Destination filename [cat4500-e-ios-promupgrade-122_44r_SG5]?
Accessing tftp://172.20.58.78/cat4500-e-ios-promupgrade-122_44r_SG5...
Loading cat4500-e-ios-promupgrade-122_44r_SG5 from 172.20.58.78 (via
FastEthernet2/1):!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!!!!!!!!!!!!
[OK - 2404172 bytes]

2404172 bytes copied in 28.536 secs (84250 bytes/sec)
Switch#
```

Step 5 On a dual-supervisor system, copy the same ROMMON image to the standby supervisor engine with the **copy bootflash:cat4500-e-ios-promupgrade-122_44r_SG5 slavebootflash** command.

Step 6 Enter the **reload** command to reset the switch, press **Ctrl-C** to stop the boot process, then re-enter ROMMON mode.



Note On a redundant system, this action causes a switchover.

The following example shows the output after a reset into ROMMON:

```
Switch# reload
Proceed with reload? [confirm]

03:57:16:%SYS-5-RELOAD:Reload requested

Rom Monitor Program Version 12.1(12r)EW
```

```
.
.(output truncated)
.

Established physical link 1Gb Full Duplex
Network layer connectivity may take a few seconds
rommon 1 >
```

Step 7 Run the PROM upgrade program by entering this command:
boot bootflash:cat4500-e-ios-promupgrade-122_44r_SG5



Caution

No intervention is necessary to complete the upgrade. To ensure a successful upgrade, do not interrupt the upgrade process. Do not perform a reset, power cycle, or OIR of the supervisor engine until the upgrade completes.

The following example shows the output from a successful upgrade, followed by a system reset:

```
rommon 2 > boot bootflash:cat4500-e-ios-promupgrade-122_44r_SG5
```

```
Image Name : Cat4K_Mpc8548_Rommon
Image size : 1048576 bytes
```

```
Uncompressing image.....
Done!
```

```
*****
*          ** Now Upgrading Primary ROMMON Image **          *
*****
```

```
Offset: 7E00000
erasing... writing... reading... verifying... Done!
```

```
*****
*          ** Now Programming FPGA Image **          *
*****
```

```
Image Name : Cat4K_JAWA_Fpga
Image size : 524288 bytes
```

```
Uncompressing image.....
Done!
```

```
Device ID 12, status 0, size 524288 bytes, we have 524288 bytes
erasing... writing/verifying sectors... 0 1 2 3 4 5 6 7 Done!
```

```
*****
System will now reset itself and reboot within few seconds
*****
*!*
```

```
*****
*
* Welcome to Rom Monitor for WS-X45-SUP6-E System.          *
* Copyright (c) 2003-2008 by Cisco Systems, Inc.             *
* All rights reserved.                                       *
*
*****
```

```

...
Rom Monitor Program Version 12.2(44r)SG5
CPU Rev: 2.0, Board Rev: 4, Board Type: 10, CPLD Jawa Rev: 20
...
rommon 1>

```

- Step 8** Boot the Cisco IOS software image. This may happen automatically if the system is configured to auto-boot.
- Step 9** On a redundant system, hook up a console to the now-active supervisor engine. After the system achieves an SSO state, repeat steps 6-8.
- Step 10** Use the **show module** command to verify that you have upgraded the ROMMON:

```

Switch# show module
Chassis Type : WS-C4510R-E

```

```

Power consumed by backplane : 40 Watts

```

Mod	Ports	Card Type	Model	Serial No.
3	48	10/100/1000BaseT POE E Series	WS-X4648-RJ45V-E	JAE1129QL9N
4	48	10/100/1000BaseT Premium POE E Series	WS-X4648-RJ45V+E	JAE1129QSAV
5	6	Sup 6-E 10GE (X2), 1000BaseX (SFP)	WS-X45-SUP6-E	JAE1225MJMN
6	6	Sup 6-E 10GE (X2), 1000BaseX (SFP)	WS-X45-SUP6-E	JAE1224LAOS
7	48	10/100/1000BaseT (RJ45)V, Cisco/IEEE	WS-X4548-RJ45V+	JAB1229BCMD
8	24	10/100/1000BaseT (RJ45)V, Cisco/IEEE	WS-X4524-GB-RJ45V	JAB0815059Q

M	MAC addresses	Hw	Fw	Sw	Status
3	001c.58f8.2240 to 001c.58f8.226f	0.3			Ok
4	001c.58f8.2090 to 001c.58f8.20bf	0.3			Ok
5	0017.94c9.85c0 to 0017.94c9.85c5	1.1	12.2(44r)SG5	12.2(50)SG	Ok
6	0017.94c9.85c6 to 0017.94c9.85cb	1.1	12.2(44r)SG5	12.2(50)SG	Ok
7	000a.8aff.3830 to 000a.8aff.385f	0.1			Ok
8	0030.850e.3e78 to 0030.850e.3e8f	0.6			Ok ...

Switch#

- Step 11** Use the **delete** command on the active supervisor to delete the PROM upgrade program from bootflash.
- The following example shows how to delete **cat4500-e-ios-promupgrade-122_44r_SG5** image from bootflash:

```

Switch# delete bootflash:cat4500-e-ios-promupgrade-122_44r_SG5
Step 12. On a redundant system, also delete the upgrade file from the standby.
Delete slavebootflash:cat4500-e-ios-promupgrade-122_44r_SG5

```

- Step 12** On a redundant system, also delete the upgrade file from the standby supervisor engine.

```

Switch# delete slavebootflash:cat4500-e-ios-promupgrade-122_44r_SG5

```

The ROMMON has now been upgraded.

Related Documentation

Although their Release Notes are unique, the 4 platforms (Catalyst 4500, Catalyst 4900, Catalyst ME 4900, and Catalyst 4900M) use the same *Software Configuration Guide*, *Command Reference Guide*, and *System Message Guide*. Refer to the following home pages for additional information:

- Catalyst 4500 Series Switch Documentation Home

<http://www.cisco.com/go/cat4500/docs>

- Catalyst 4900 Series Switch Documentation Home

<http://www.cisco.com/go/cat4900/docs>

- Cisco ME 4900 Series Ethernet Switches Documentation Home

http://www.cisco.com/en/US/products/ps7009/tsd_products_support_series_home.html

Hardware Documents

Installation guides and notes including specifications and relevant safety information are available at the following URLs:

- *Catalyst 4500 Series Switches Installation Guide*

<http://www.cisco.com/en/US/docs/switches/lan/catalyst4500/hardware/installation/guide/78-14409-08/4500inst.html>

- *Catalyst 4500 E-series Switches Installation Guide*

<http://www.cisco.com/en/US/docs/switches/lan/catalyst4500/hardware/catalyst4500e/installation/guide/Eseries.html>

- For information about individual switching modules and supervisors, refer to the *Catalyst 4500 Series Module Installation Guide* at:

http://www.cisco.com/en/US/docs/switches/lan/catalyst4500/hardware/module/guide/mod_inst.html

- *Regulatory Compliance and Safety Information for the Catalyst 4500 Series Switches*

http://www.cisco.com/en/US/docs/switches/lan/catalyst4500/hardware/regulatory/compliance/78_13233.html

- Installation notes for specific supervisor engines or for accessory hardware are available at:

http://www.cisco.com/en/US/products/hw/switches/ps4324/prod_installation_guides_list.html

- Catalyst 4900 and 4900M hardware installation information is available at:

http://www.cisco.com/en/US/products/ps6021/prod_installation_guides_list.html

- Cisco ME 4900 Series Ethernet Switches installation information is available at:

http://www.cisco.com/en/US/products/ps7009/prod_installation_guides_list.html

Software Documentation

Software release notes, configuration guides, command references, and system message guides are available at the following URLs:

- Catalyst 4500 release notes are available at:

http://www.cisco.com/en/US/products/hw/switches/ps4324/prod_release_notes_list.html

- Catalyst 4900 release notes are available at:

http://www.cisco.com/en/US/products/ps6021/prod_release_notes_list.html

- Cisco ME4900 4900 Series Ethernet Switch release notes are available at:

http://www.cisco.com/en/US/docs/switches/lan/catalyst4500/release/note/OL_11511.html

Software documents for the Catalyst 4500 Classic, Catalyst 4500 E-Series, Catalyst 4900, and Cisco ME 4900 Series Ethernet Switches are available at the following URLs:

- *Catalyst 4500 Series Software Configuration Guide*
http://www.cisco.com/en/US/products/hw/switches/ps4324/products_installation_and_configuration_guides_list.html
- *Catalyst 4500 Series Software Command Reference*
http://www.cisco.com/en/US/products/hw/switches/ps4324/prod_command_reference_list.html
- *Catalyst 4500 Series Software System Message Guide*
http://www.cisco.com/en/US/products/hw/switches/ps4324/products_system_message_guides_list.html

Cisco IOS Documentation

Platform-independent Cisco IOS documentation may also apply to the Catalyst 4500 and 4900 switches. These documents are available at the following URLs:

- Cisco IOS configuration guides, Release 12.x
http://www.cisco.com/en/US/products/ps6350/products_installation_and_configuration_guides_list.html
- Cisco IOS command references, Release 12.x
http://www.cisco.com/en/US/products/ps6350/prod_command_reference_list.html
You can also use the Command Lookup Tool at:
<http://tools.cisco.com/Support/CLILookup/cltSearchAction.do>
- Cisco IOS system messages, version 12.x
http://www.cisco.com/en/US/products/ps6350/products_system_message_guides_list.html
You can also use the Error Message Decoder tool at:
<http://www.cisco.com/cgi-bin/Support/Errordecoder/index.cgi>
- For information about MIBs, refer to:
<http://www.cisco.com/public/sw-center/netmgmt/cmtk/mibs.shtml>

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>

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