



# Upgrading OmniSwitch 7700/7800/8800 to 5.1.5.R01

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## Overview

This instruction sheet documents how to upgrade OmniSwitch 7700 CMM (OS7700-CMM), OmniSwitch 7800 CMM (OS7800-CMM), and OmniSwitch 8800 CMM (OS8800-CMM) modules to 5.1.5.R01 software and firmware.

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**WARNING.** Failure to follow the steps correctly can permanently damage CMM hardware.

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This instruction sheet only applies to users upgrading to 5.1.5.R01. Do not use this instruction sheet for upgrades on later builds.

## Upgrade Steps

This instruction sheet requires that the following conditions exist or are performed before upgrading:

Perform the following steps:

- 1 On OmniSwitch 7700 and 7800 switches use [WebView](#) (see [Verifying the Upgrade with WebView on page 15](#)) or use the **show hardware info** and the **show microcode** commands (see [Verifying the Upgrade with the CLI on page 21](#)) to verify that the MiniBoot/BootROM version is 5.1.5.340.R01 and the software version is 5.1.5.R01. If so, do *not* perform these instructions. If not, continue to the next step.

On OmniSwitch 8800 switches use [WebView](#) (see [Verifying the Upgrade with WebView on page 15](#)) or use the **show hardware info** and the **show microcode** commands (see [Verifying the Upgrade with the CLI on page 21](#)) to verify that the MiniBoot/BootROM version is 5.1.5.340.R01 and the software version is 5.1.5.R01. If so, do *not* perform these instructions. If not, continue to the next step.

- 2 On OmniSwitch 7700, 7800, and 8800 switches if the software version is not 5.1.5.R01 perform the steps described in [Upgrading the Image Files with WebView on page 4](#) or [Upgrading the Image Files with the CLI on page 17](#).
- 3 On OmniSwitch 7700, 7800, and 8800 switches if the MiniBoot/BootROM version is not 5.1.5.340.R01 perform the steps described in [Updating the MiniBoot/BootROM with WebView on page 8](#) or [Updating the MiniBoot/BootROM with the CLI on page 19](#).

## Prerequisites

This instruction sheet requires that the following conditions exist or are performed before upgrading:

- Make sure the primary and secondary (if present) CMM's **boot.cfg** file contains the CLI command **aaa authentication default local**. Use the **show configuration snapshot aaa** command to determine if this command is present.
- All CLI commands must be executed via a Console Port connection, not through a Telnet session. If you are performing a remote upgrade, then the console port must be connected through a terminal server (via Telnet, PuTTY, etc.) in the same location as the switch you are upgrading.
- Alcatel recommends that you have at least 2.5 MB (preferably 3 MB) of free space in **/flash** memory on OmniSwitch 7700/7800 switches and at least 3.5 MB (preferably 4 MB) of free space in **/flash** memory on OmniSwitch 8800 switches before beginning.
- The person performing the upgrade must:
  - be the responsible party for maintaining the switches' configuration
  - be aware of any issues that may arise from a network outage caused by improperly loading this code
  - understand that the switch must be rebooted and network users will be affected by this procedure
  - have a working knowledge of the switch to configure it to accept an FTP connection through the EMP or Network Interface (NI) Ethernet port.

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**WARNING.** Do not proceed until all the above prerequisites have been met.

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# List of Topics

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# Upgrading the Image Files with WebView

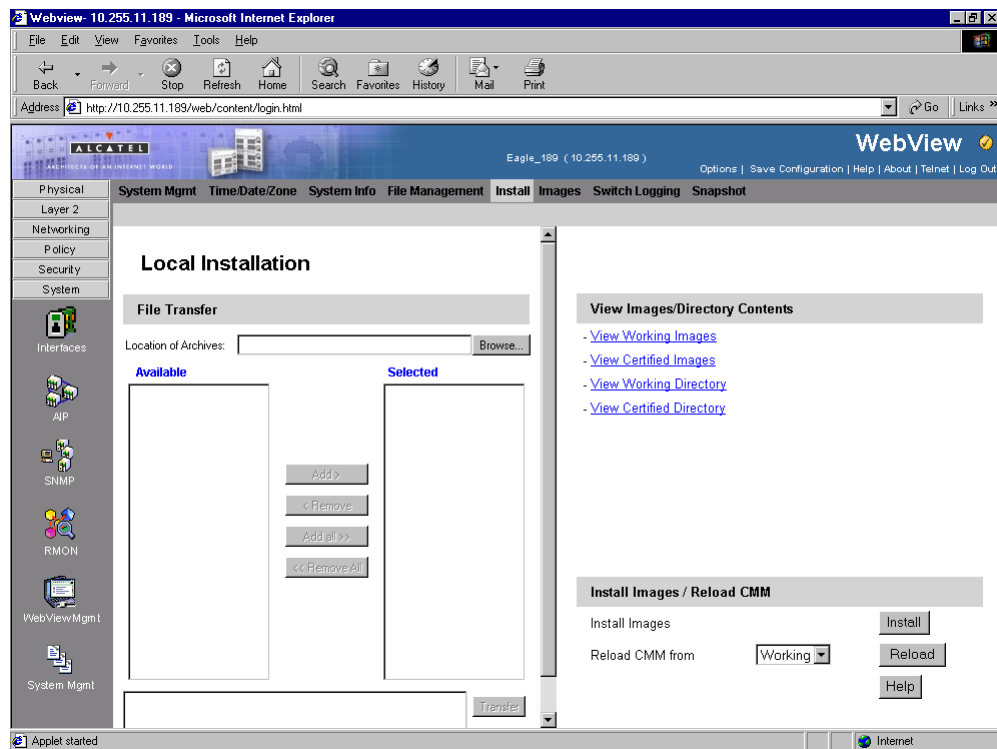
Follow the steps below to upgrade the image files on OmniSwitch 7700/7800/8800 switches to Release 5.1.5.R01 with WebView. You should review all steps in this procedure before beginning.

**Caution.** Do not FTP the **miniboot.default**, **miniboot.backup**, and **bootrom.bin** files at this time. See the related sections for those instructions.

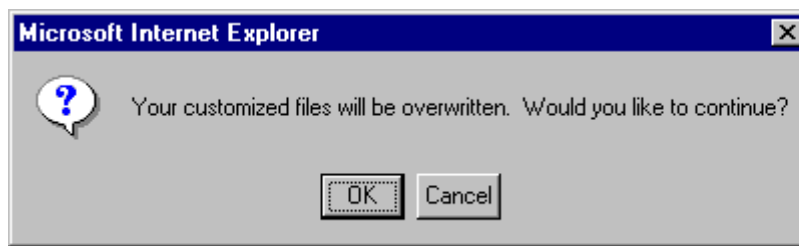
- 1 FTP the 5.1.5.R01 image files to the **/flash/working** directory.

**Note.** If you have dual CMMs make sure you FTP the files to the primary CMM (CMM-A).

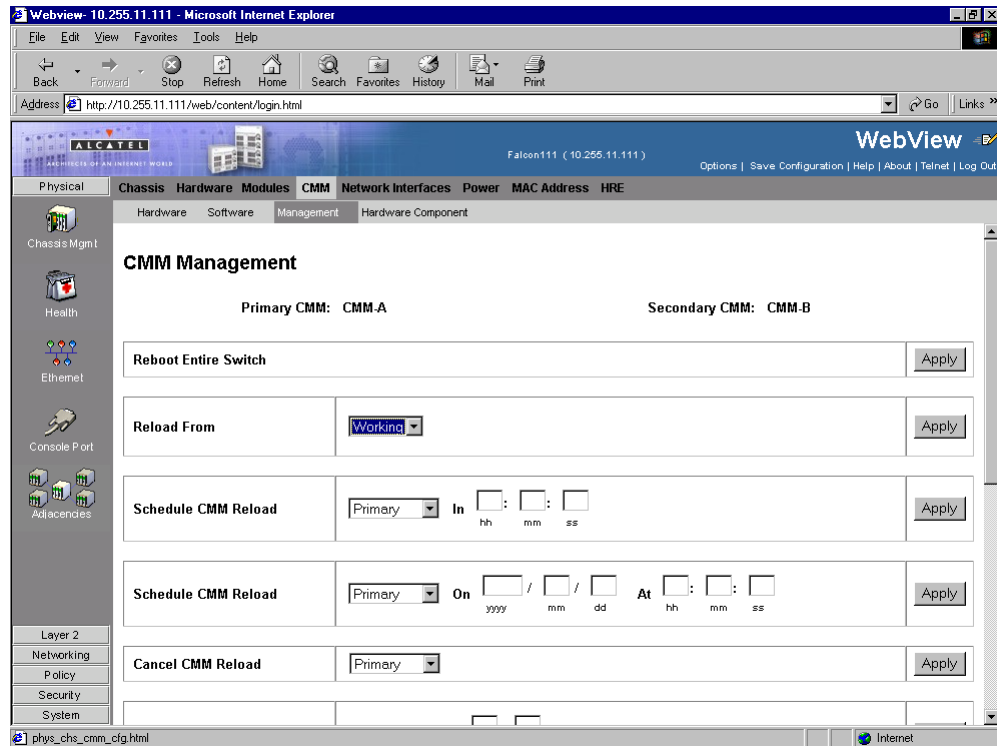
- 2 Log into WebView.
- 3 Select **System > System Mgmt > Install** as shown below:



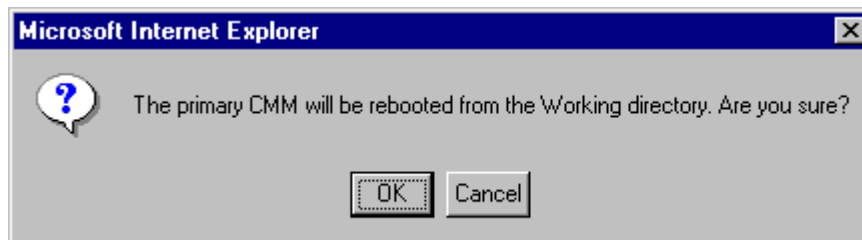
- 4 Click the **Install** button. The following pop-up window will be displayed:



- 5 Click **OK**.
- 6 Select **Physical > Chassis Mgmt > CMM > Management** as shown below:

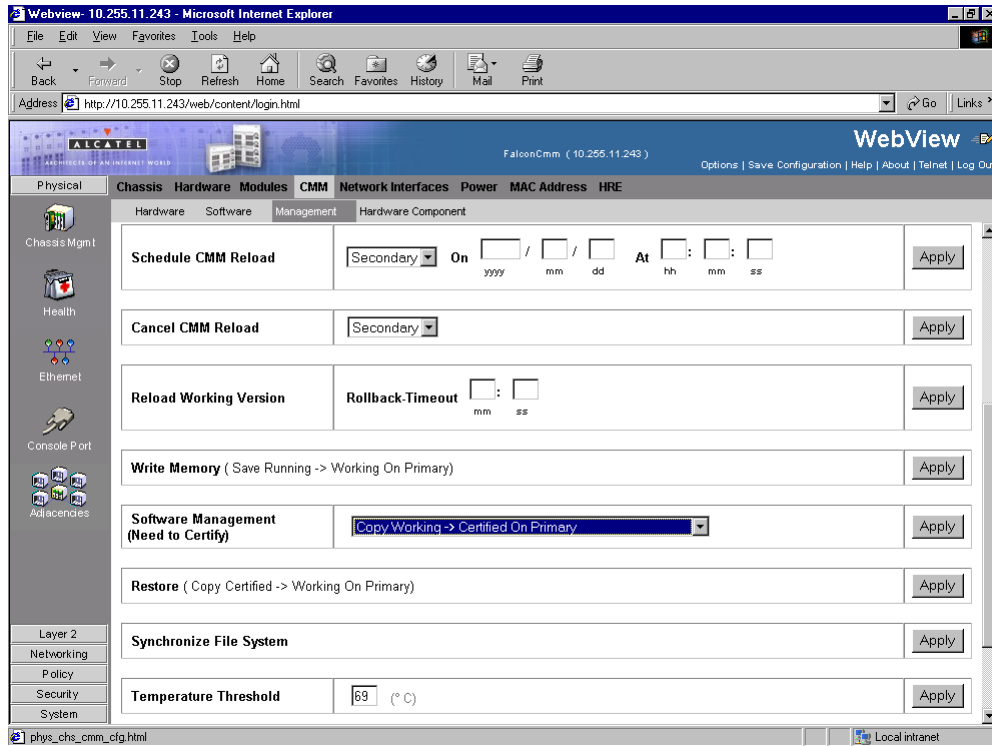


- 7 In the **Reload From** box Select **Working** and Click **Apply**. The following pop-up window will be displayed:

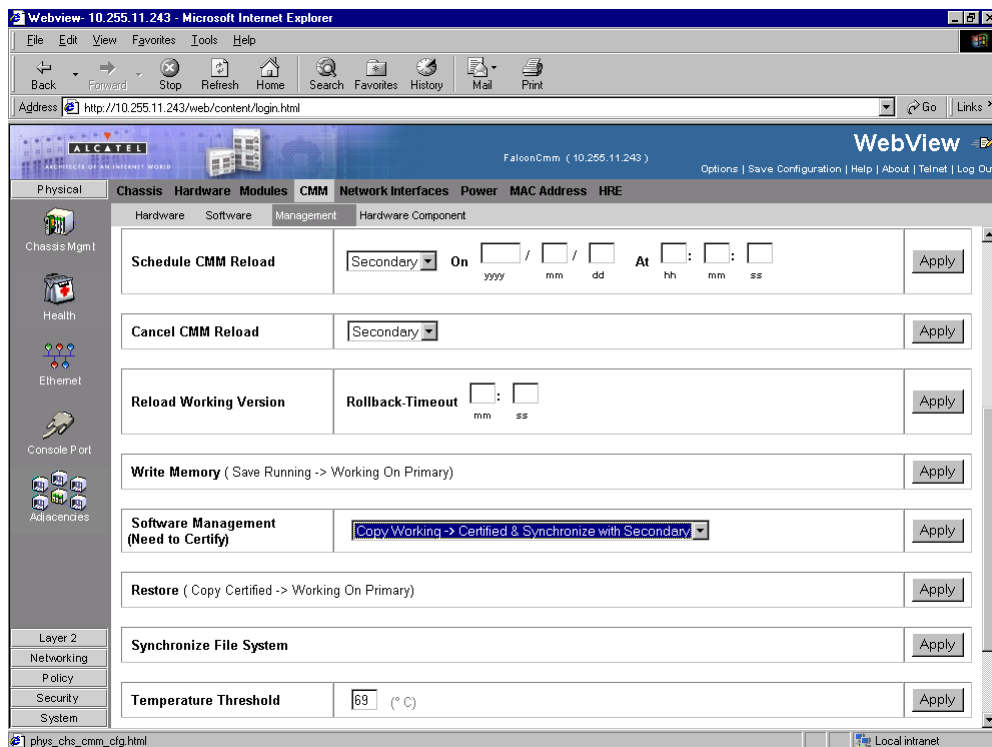


- 8 Click **OK**. The switch will now reboot to the new working version. (Wait for the command to finish executing.)
- 9 After the CMM finishes rebooting log into WebView.
- 10 Select **Physical > Chassis Mgmt > CMM > Management**.

**11** If you have a single CMM select **Copy Working -> Certified on Primary** in the **Software Management** box as shown below:



If you have dual redundant CMMs select **Copy Working -> Certified & Synchronized with Secondary** in the **Software Management** box as shown below:



The following window will be displayed:



- 12** Click **OK**. The image file upgrade is complete. See [Verifying the Software with WebView on page 16](#) to confirm the upgrade.

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**Note.** In dual redundant configurations the secondary CMM (CMM-B) will reboot.

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- 13** If the MiniBoot and BootROM are not 5.1.5.340.R01 continue to [Updating the MiniBoot/BootROM with WebView on page 8](#). (See [Verifying the Firmware with WebView on page 15](#) for more information.)

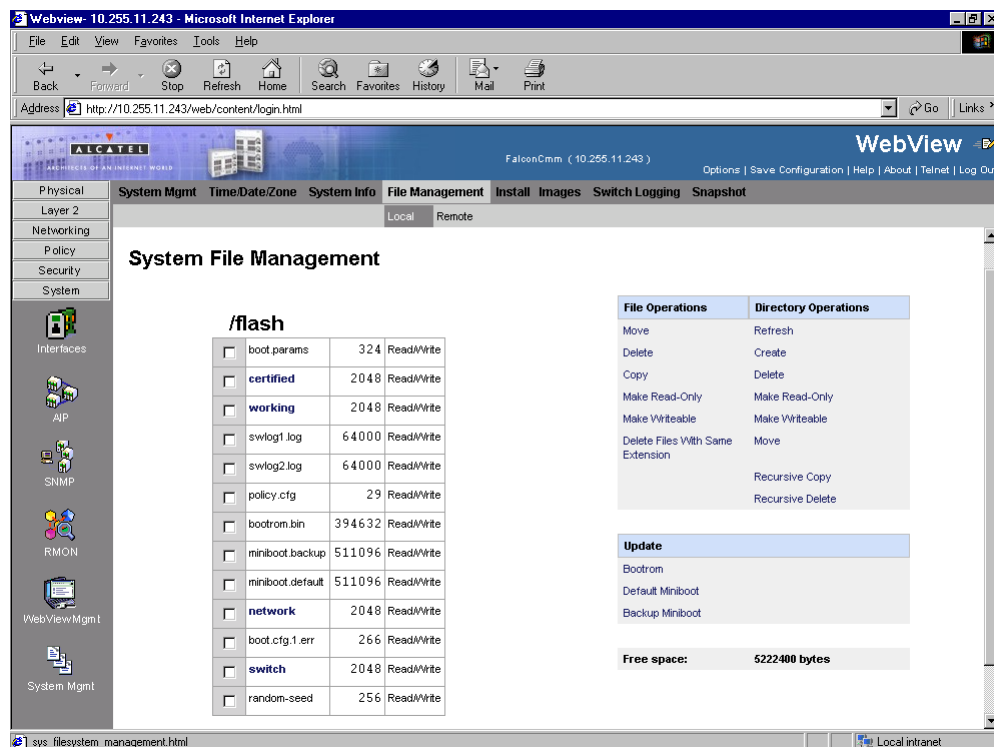
If the image files are 5.1.5.R01 and the MiniBoot and BootROM are 5.1.5.340.R01 the upgrade to 5.1.5.R01 is now complete. (See [Verifying the Upgrade with WebView on page 15](#) for more information.)

# Updating the MiniBoot/BootROM with WebView

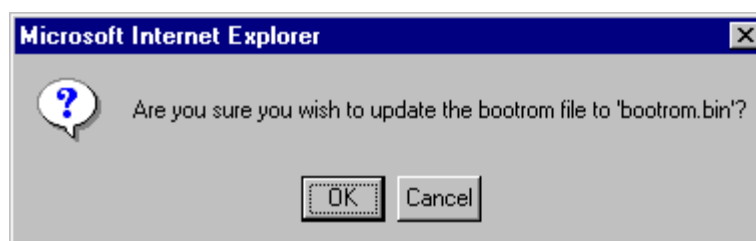
Follow the steps below to upgrade the MiniBoot and BootROM to 5.1.5.340.R01 with WebView. Please note that Release 5.1.5.R01 image files must be installed to use the steps in this procedure. See [Upgrading the Image Files with WebView on page 4](#) for more information.

**WARNING.** All CMMs must be certified and in redundant configurations both CMMs must be synchronized before beginning. In addition, the switch must be running in the Working directory. Use the **show running-directory** command to confirm these conditions.

- 1 Download the **bootrom.bin**, **miniboot.backup**, and **miniboot.default** files from the Alcatel's Service and Support code directory to the **/flash** directory.
- 2 Log into WebView.
- 3 Select **System > System Mgmt > File Management > Local** as shown below:

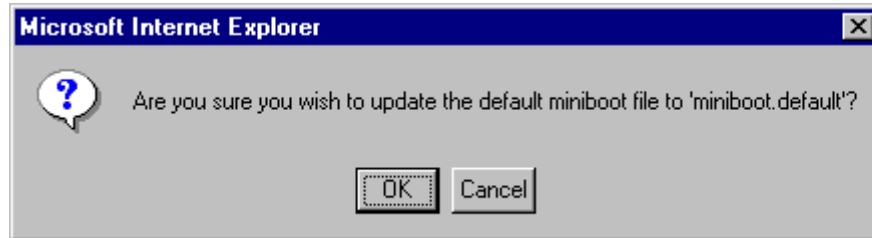


- 4 Check the box next to **bootrom.bin**.
- 5 Select **Bootrom** in the **Update** box. The following confirmation window will be displayed:

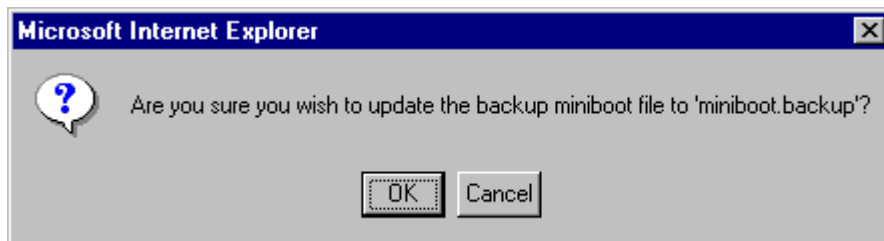




- 6 Click **OK**.
- 7 Check the box next to **miniboot.default**.
- 8 Select **Default Miniboot** in the **Update** box. The following confirmation window will be displayed:

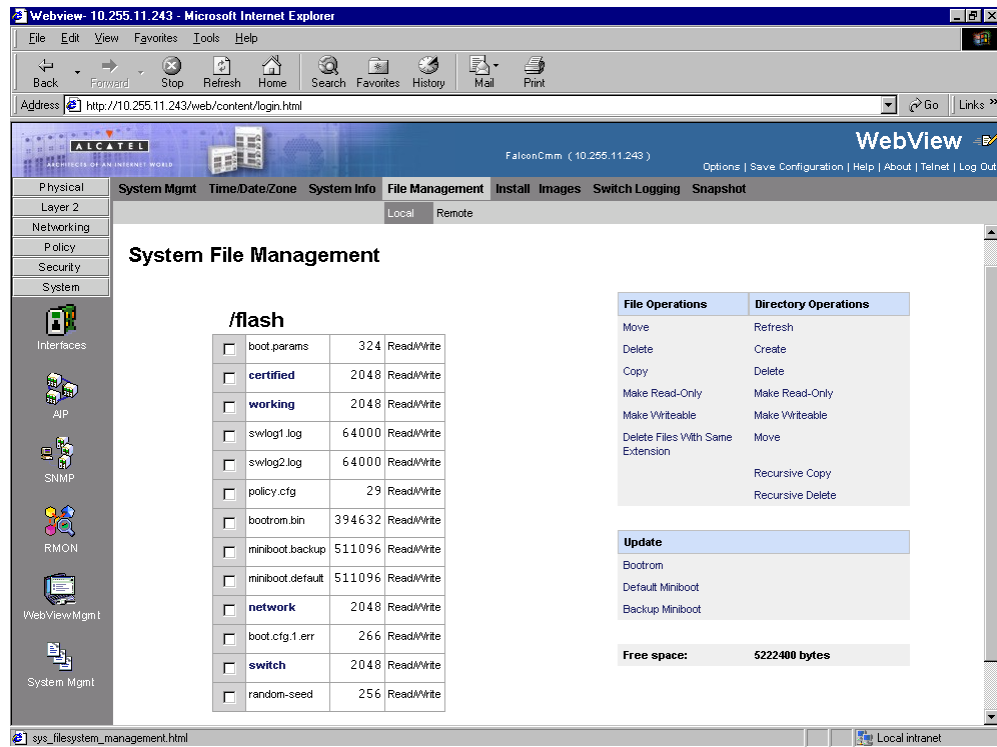


- 9 Click **OK**.
- 10 Check the box next to **miniboot.backup**.
- 11 Select **Backup Miniboot** in the **Update** box. The following confirmation window will be displayed:



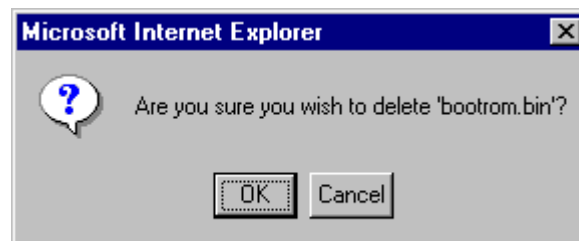
- 12 Click **OK**. The MiniBoot and BootROM upgrades on CMM-A are now complete. See [Verifying the Firmware with WebView on page 15](#) to confirm your upgrade.

**13** Select **System > System Mgmt > File Management > Local** as shown below:



**14** Check the box next to **bootrom.bin**.

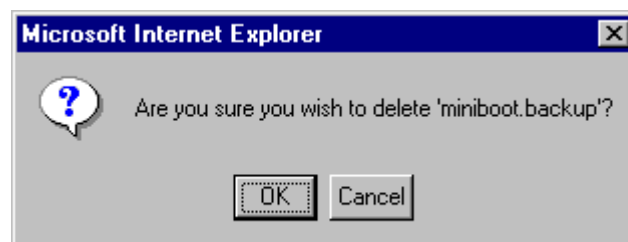
**15** Select **Delete** in the **File Operations** box. The following confirmation window will be displayed:



**16** Click **OK**.

**17** Check the box next to **miniboot.backup**.

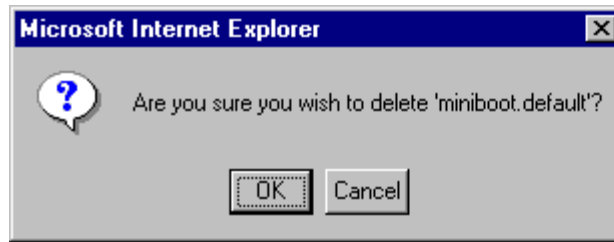
**18** Select **Delete** in the **File Operations** box. The following confirmation window will be displayed:



**19** Click **OK**.

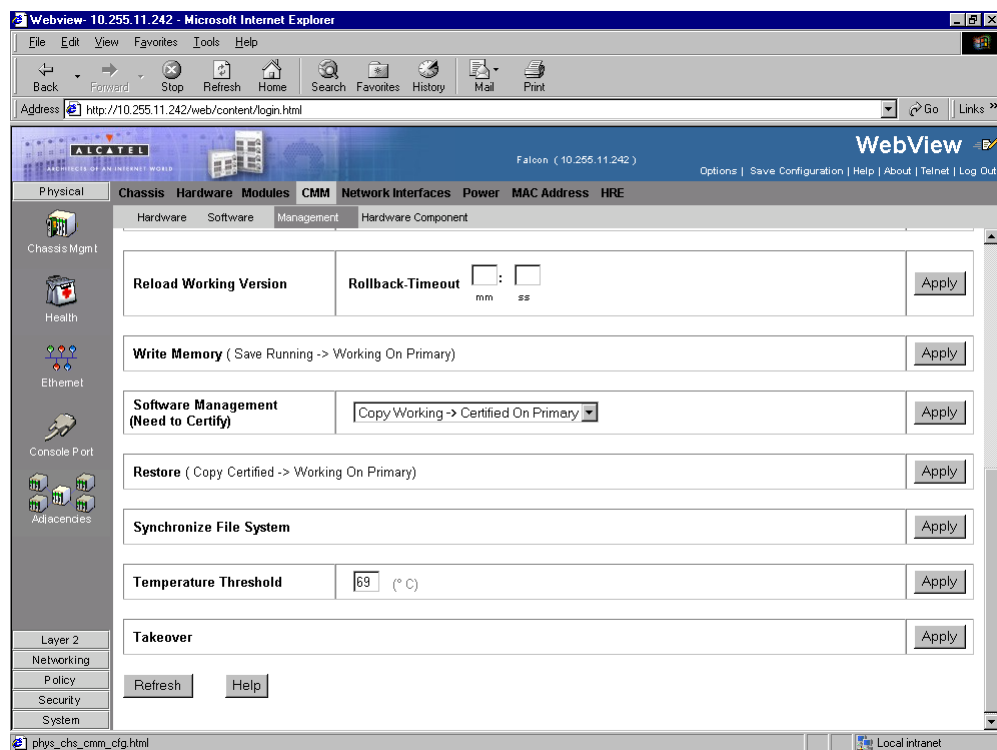
**20** Check the box next to **miniboot.default**.

- 21** Select **Delete** in the **File Operations** box. The following confirmation window will be displayed:

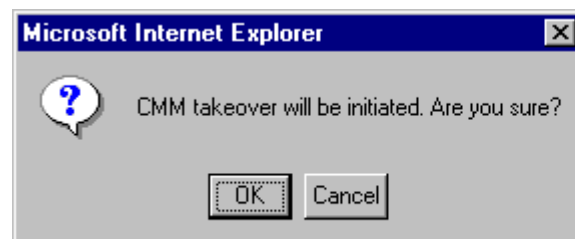


- 22** Click **OK**. If you have a switch with a single CMM and the image files are 5.1.5.R01 and the Mini-Boot and BootROM are 5.1.5.340.R01 the upgrade to 5.1.5.R01 is now complete. Otherwise, continue to [Step 23](#) below.

- 23** Select **Physical > Chassis Mgmt > CMM > Management** as shown below:



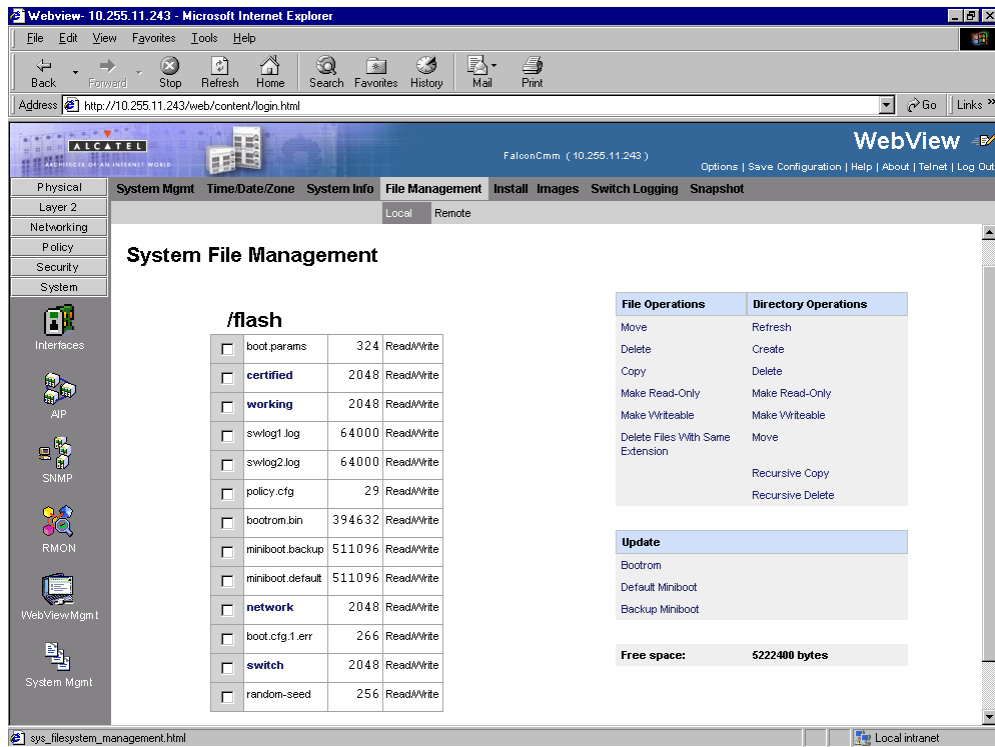
- 24** Click **Apply** in the **Takeover** box. The following pop-up window will be displayed:



- 25** Click **OK**. The switch will reboot and the secondary CMM (CMM-B) will now become primary.

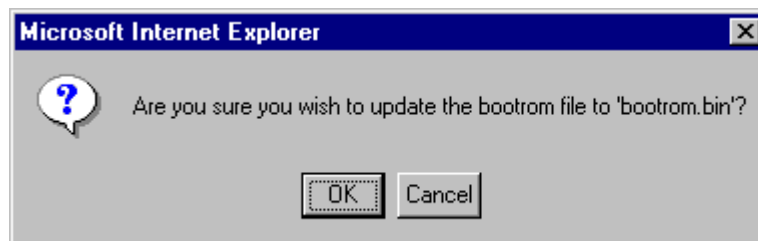
- 26** Download the **bootrom.bin**, **miniboot.backup**, and **miniboot.default** files from the Alcatel's Service and Support code directory to the **/flash** directory of CMM-B (the current primary).

**27** Select **System > System Mgmt > File Management > Local** as shown below:



**28** Check the box next to **bootrom.bin**.

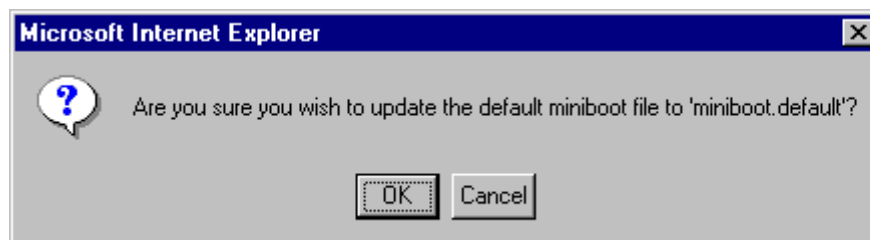
**29** Select **Bootrom** in the **Update** box. The following confirmation window will be displayed:



**30** Click **OK**.

**31** Check the box next to **miniboot.default**.

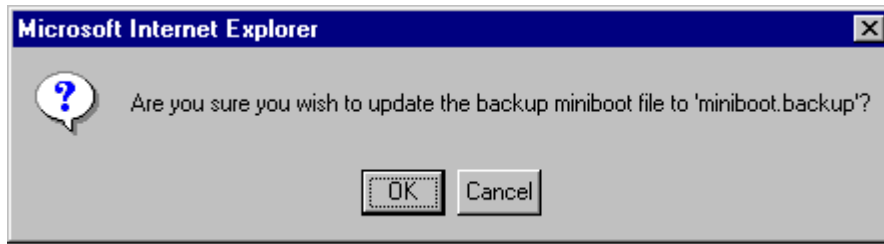
**32** Select **Default Miniboot** in the **Update** box. The following confirmation window will be displayed:



**33** Click **OK**.

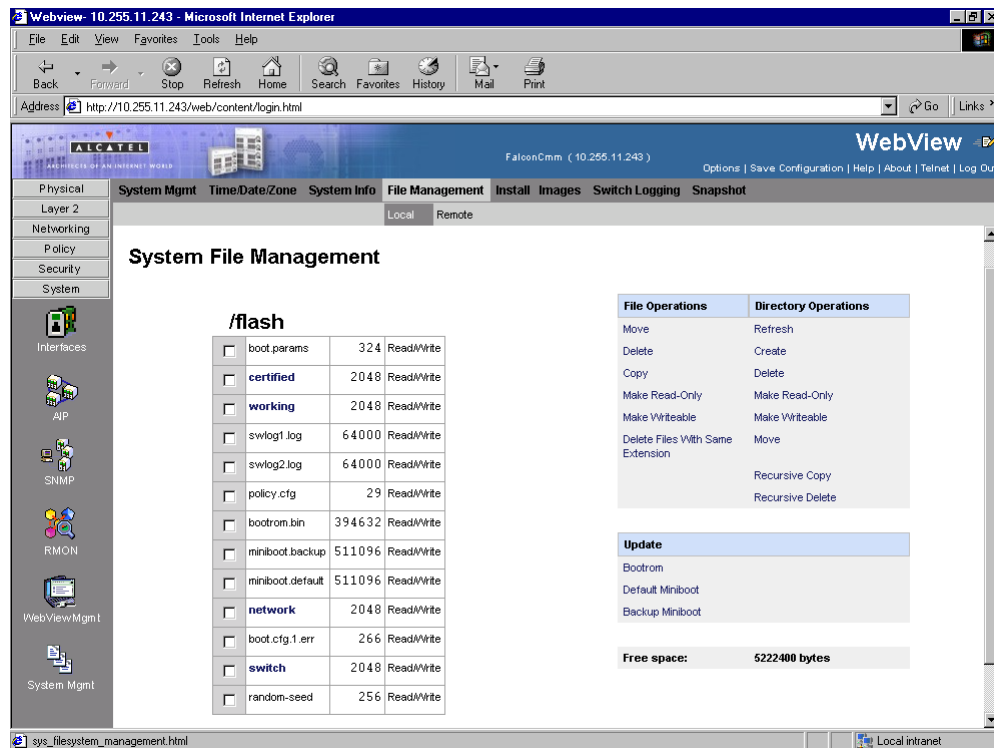
**34** Check the box next to **miniboot.backup**.

**35** Select **Backup Miniboot** in the **Update** box. The following confirmation window will be displayed:



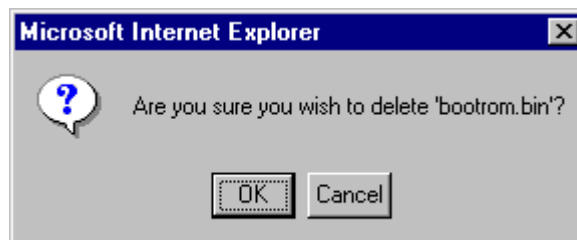
**36** Click **OK**. The MiniBoot and BootROM upgrades on CMM-B are now complete. See [Verifying the Firmware with WebView on page 15](#) to confirm your upgrade.

**37** Select **System > System Mgmt > File Management > Local** as shown below:



**38** Check the box next to **bootrom.bin**.

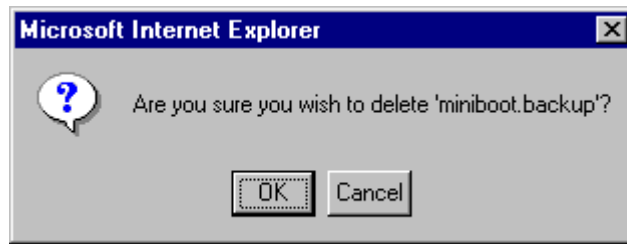
**39** Select **Delete** in the **File Operations** box. The following confirmation window will be displayed:



**40** Click **OK**.

**41** Check the box next to **miniboot.backup**.

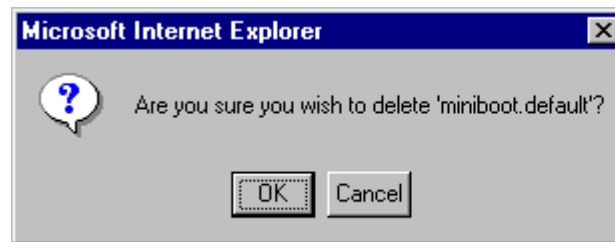
**42** Select **Delete** in the **File Operations** box. The following confirmation window will be displayed:



**43** Click **OK**.

**44** Check the box next to **miniboot.default**.

**45** Select **Delete** in the **File Operations** box. The following confirmation window will be displayed:



**46** Click **OK**.

If the image files are 5.1.5.R01 and the MiniBoot and BootROM are 5.1.5.340.R01 the upgrade to 5.1.5.R01 is now complete. (See [Verifying the Upgrade with WebView on page 15](#) for more information.)

# Verifying the Upgrade with WebView

You can use WebView to verify that your upgrade is successful.

## Verifying the Firmware with WebView

To verify that the MiniBoot/BootROM has been successfully upgraded to 5.1.5.340.R01 on OmniSwitch 7700, 7800, and 8800 switches, select **Physical > Chassis Mgmt > CMM > Hardware Component** as shown below:

The screenshot shows the Alcatel WebView interface in a Microsoft Internet Explorer browser window. The browser address bar shows 'http://10.255.11.189/web/content/login.html'. The WebView interface has a navigation menu on the left with options like Physical, Health, Ethernet, Console Port, and Alacencies. The main content area is titled 'CMM Hardware Component Information' and displays a table of hardware details. A text box on the right of the table states: 'The MiniBoot and BootROM have been correctly updated to 5.1.5.340.R01'. Below the table are 'Refresh' and 'Help' buttons.

Flash Manufacturer	Amd
Flash Size (bytes)	33554432
RAM Manufacturer	Other
RAM Size (bytes)	123731968
NVRAM Battery Status	Ok
CPU Type	SparcV9
Interrupt Boot Jumper	Enable
Force UART Defaults Jumper	Enable
Run Extended Memory Diags Jumper	Disable
Spare Jumper	Enable
BootROM Version	5.1.5.340.R01
Backup Miniboot Version	5.1.5.340.R01
Default Miniboot Version	5.1.5.340.R01
FPGA Version	42

The MiniBoot and BootROM have been correctly updated to 5.1.5.340.R01

## Verifying the Software with WebView

To verify that the software was correctly upgraded to 5.1.5.R01, select **System > System Mgmt > Images > Loaded Images** as shown below:

The screenshot shows the Alcatel WebView interface for a Falcon switch. The 'System Mgmt' menu is open, and the 'Images' sub-menu is selected. The 'Loaded Images' tab is active, displaying a table of loaded image files. The table has four columns: Version, Name, Description, and Size. All entries in the 'Version' column are 5.1.5.374.R01. A blue box highlights the 'Version' column, and a blue arrow points to the text 'The image files have been correctly updated to 5.1.5.R01.'

Version	Name	Description	Size
5.1.5.374.R01	Fadvrout.img	Alcatel Advanced Routing	938636
5.1.5.374.R01	Fbase.img	Alcatel Base Software	3826776
5.1.5.374.R01	Fdiag.img	Alcatel Diagnostics Archive	331004
5.1.5.374.R01	Feni.img	Alcatel NI Software	1093850
5.1.5.374.R01	FI2eth.img	Alcatel Layer 2, Ethernet	860375
5.1.5.374.R01	Fos.img	Alcatel Operating System	981520
5.1.5.374.R01	Fqos.img	Alcatel Quality of Service	338790
5.1.5.374.R01	Frout.img	Alcatel Routing	596480
5.1.5.374.R01	Fsecu.img	Alcatel Security	130416
5.1.5.374.R01	Fweb.img	Alcatel Webview - Main	1219809
5.1.5.374.R01	Fwebadvrout.img	Alcatel Webview - Advanced Routing	231864
5.1.5.374.R01	FwebI2eth.img	Alcatel Webview - Layer 2 and Ethernet drivers	264747
5.1.5.374.R01	Fwebqos.img	Alcatel Webview - Quality of Service	245011
5.1.5.374.R01	Fwebroun.img	Alcatel Webview - Routing	224042
5.1.5.374.R01	Fwebsecu.img	Alcatel Webview - Security	202878

In addition, you should also select **System > System Mgmt > Images > Images in Certified** and **System > System Mgmt > Images > Images in Working** to verify that Certified and Working directories have been correctly upgraded to Release 5.1.5.R01.

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**Note.** Refer to the online help and to the *OmniSwitch 7700/7800/8800 Switch Management Guide* for more documentation on WebView.

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# Upgrading the Image Files with the CLI

Follow the steps below to upgrade the image files on OmniSwitch 7700/7800/8800 switches to Release 5.1.5.R01 through the CLI. You should review all steps in this procedure before beginning.

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**Caution.** Do not FTP the **miniboot.default**, **miniboot.backup**, and **bootrom.bin** files at this time. See the related sections for those instructions.

---

- 1 FTP the 5.1.5.R01 image files to the **/flash/working** directory.

---

**Note.** If you have dual CMMs make sure you FTP the files to the primary CMM (CMM-A).

---

- 2 Log into the CMM.

---

**Note.** In dual redundant configurations you must log into the primary CMM (CMM-A).

---

- 3 At the CLI prompt enter:

```
-> install *.img
```

- 4 When prompted to install the WebView security image file (**Fwebsecu.img** on OmniSwitch 7700/7800 and **Ewebsecu.img** on OmniSwitch 8800) answer **y**.

- 5 Enter:

```
-> reload working no rollback-timeout
```

The switch will now reboot to the new working version.

- 6 Log into the CMM.

---

**Note.** In dual redundant configurations you must log into the primary CMM (CMM-A).

---

- 7 If you have a single CMM enter:

```
-> copy working certified
```

If you have dual redundant CMMs enter:

```
-> copy working certified flash-synchro
```

Wait for the command to finish executing.

---

**Note.** In dual redundant configurations the secondary CMM (CMM-B) will reboot.

---

- 8 If the MiniBoot and BootROM are not 5.1.5.340.R01 continue to [Updating the MiniBoot/BootROM with the CLI on page 19](#). (See [Verifying the Upgrade with the CLI on page 21](#) for more information.)

If the image files are 5.1.5.R01 and the MiniBoot and BootROM are 5.1.5.340.R01 the upgrade to 5.1.5.R01 is now complete. (See [Verifying the Upgrade with the CLI on page 21](#) for more information.)

# Updating the MiniBoot/BootROM with the CLI

Follow the steps below to upgrade the MiniBoot and BootROM to 5.1.5.340.R01. Please note that Release 5.1.5.R01 image files must be installed to use the steps in this procedure. See [Upgrading the Image Files with the CLI on page 17](#) for more information.

---

**WARNING.** All CMMs must be certified and in redundant configurations both CMMs must be synchronized before beginning. In addition, the switch must be running in the Working directory. Use the **show running-directory** command to confirm these conditions.

---

- 1 Download the **bootrom.bin**, **miniboot.backup**, and **miniboot.default** files from the Alcatel's Service and Support code directory to the **/flash** directory.
- 2 Log into the CMM.

---

**Note.** In dual redundant configurations you must log into the primary CMM (CMM-A).

---

- 3 Enter

```
-> update bootrom bootrom.bin
```

- 4 Enter

```
-> update default miniboot miniboot.default
```

- 5 Enter

```
-> update backup miniboot miniboot.backup
```

- 6 If you have a single CMM go to [Step 14](#) on [Page 20](#). Otherwise, continue to [Step 7](#) below.

- 7 Log out of the primary CMM (CMM-A) and log into the secondary CMM (CMM-B).

- 8 Enter:

```
-> takeover
```

A prompt similar to the following will be displayed:

```
Confirm Takeover (Y/N) :
```

- 9 Press **Y**. The switch will reboot and the secondary CMM (CMM-B) will now become primary.

- 10 Download the **bootrom.bin**, **miniboot.backup**, and **miniboot.default** files from the Alcatel's Service and Support code directory to the **/flash** directory of CMM-B (the current primary).

- 11 Enter

```
-> update bootrom bootrom.bin
```

- 12 Enter

```
-> update default miniboot miniboot.default
```

**13** Enter

```
-> update backup miniboot miniboot.backup
```

**14** Enter:

```
-> rm bootrom.bin
```

**15** Enter:

```
-> rm miniboot.default
```

**16** Enter:

```
-> rm miniboot.backup
```

**17** If you have a single CMM and the image files are 5.1.5.R01 and the MiniBoot and BootROM are 5.1.5.340.R01 the upgrade to 5.1.5.R01 is now complete. Otherwise, continue to [Step 18](#) below.

**18** Log into the current secondary CMM (CMM-A).

**19** Enter:

```
-> rm bootrom.bin
```

**20** Enter:

```
-> rm miniboot.default
```

**21** Enter:

```
-> rm miniboot.backup
```

If the image files are 5.1.5.R01 and the MiniBoot and BootROM are 5.1.5.340.R01 the upgrade to 5.1.5.R01 is now complete. (See [Verifying the Upgrade with the CLI on page 21](#) for more information.)

## Verifying the Upgrade with the CLI

You can use Command Line Interface (CLI) commands to verify that your upgrade is successful. To verify that the MiniBoot/BootROM has been successfully upgraded to 5.1.5.340.R01 on OmniSwitch 7700, 7800, and 8800 switches, use the **show hardware info** command as shown below:

```
-> show hardware info
CPU Type                : UltraSPARC IIe (SPARC-V9),
Flash Manufacturer     : AMD,
Flash size             : 33554432 bytes (32 MB),
RAM Manufacturer       : Micron,
RAM size               : 134217728 bytes (128 MB),
NVRAM Battery OK      : YES,
Interrupt Boot Jumper : ON,
Force UART Defaults Jumper : OFF,
Run Extended Memory Diags Jumper : OFF,
Spare Jumper          : OFF,
BootROM Version        : 5.1.5.340.R01,
Backup Miniboot Version : 5.1.5.340.R01,
Default Miniboot Version : 5.1.5.340.R01,
FPGA (1) Version      : 42,
FPGA (2) Version      : 42
```

The MiniBoot and BootROM have been correctly updated to 5.1.5.340.R01.

To verify that the software was correctly upgraded to 5.1.5.R01, use the **show microcode** command as shown below:

```
-> show microcode
Package      Release          Size      Description
-----+-----+-----+-----
Fadvrout.img 5.1.5.374.R01    845974   Advanced Routing
Fbase.img    5.1.5.374.R01    3615701  Base Software
Feni.img     5.1.5.374.R01    1140446  NI Software
Fl2eth.img   5.1.5.374.R01    806878   Layer 2, Ethernet
Fos.img      5.1.5.374.R01    937390   Operating System
Fqos.img     5.1.5.374.R01    289273   Quality of Service
Frout.img    5.1.5.374.R01    516176   Routing
Fsecu.img    5.1.5.374.R01    129759   Security
Fweb.img     5.1.5.374.R01    1216555  Webview - Main
Fwebadvrout.img 5.1.5.374.R01    238855   Webview - Advanced Routing
Fweb12eth.img 5.1.5.374.R01    264772   Webview - Layer 2 and Etherne
Fwebqos.img  5.1.5.374.R01    225978   Webview - Quality of Service
Fwebrount.img 5.1.5.374.R01    220240   Webview - Routing
Fwebsecu.img 5.1.5.374.R01    206088   Webview - Security
```

The image files have been correctly updated to 5.1.5.R01.

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**Note.** Refer to the *OmniSwitch CLI Reference Guide* for complete documentation on CLI commands.

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