ROMMON Release Notes for Supervisor Engine 7-E on the Cisco RF Gateway 10

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This document describes how to download the new ROMMON image from Cisco.com and then upgrade the ROMMON on the Cisco RF Gateway 10 (RFGW-10) Universal Edge Quadrature Amplitude Modulation (EQAM) platform.

We recommend that you refer to the latest ROMMON image.

This document consists of the following:

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 the Cisco RFGW-10 Supervisor Engine 7-E.

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Caveats

Bug	Description
CSCub34955	**Symptom:** On the first attempt, ROMMON for Cisco RFGW-10 Supervisor Engine 7-E fails to "dir usb0". **Conditions:** This issue occurs under normal conditions. **Workaround:** There is no workaround.

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.

Note Ensure that you run Cisco IOS-XE Release 3.3.1SQ or later releases on the Supervisor engine 7-E for using the new version of Cisco DS-384 line card (with P4080 CPU revision 3). If the Supervisor engine 7-E is running a release earlier than Cisco IOS-XE Release 3.3.1SQ, the new version of the Cisco DS-384 line card (with P4080 CPU revision 3) does not downgrade and hence, does not work.

Choosing a ROMMON image for Supervisor Engine 7-E

Table 1 provides the list of ROMMON software releases supported in various Cisco IOS Releases for the RFGW-10, along with the ROMMON image filename. To upgrade the Supervisor Engine, download the appropriate Cisco ROMMON release from Cisco.com using the below information.

Table 1 Supported Cisco ROMMON Software Releases

ROMMON Software Release	ROMMON Image Filename	Release Date	Supported Cisco IOS Release on RFGW-10
Cisco ROMMON 15.0(1r)SQ(315)	RFGW10-e-ios-rfgwuf w-150-1r-SQ	October 2012	Cisco IOS Release 15.0(2)SQA

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.

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 RFGW-10 ROMMON image, **RFGW10-e-ios-rfgwufw-150-1r-SQ**, from Cisco.com, and place it on a TFTP server in a directory that is accessible from the Supervisor that is upgraded

The ROMMON image, **RRFGW10-e-ios-rfgwufw-150-1r-SQ**, is available at the same location from which you download Cisco RFGW-10 system images on Cisco.com.

Step 3 Use the **dir bootflash:** command to ensure that sufficient space exists in Flash memory to store the ROMMON upgrade image.

If you are using a CompactFlash card, replace **bootflash:** with **slot0:**

Step 4 Download the **RFGW10-e-ios-rfgwufw-150-1r-SQ** program into Flash memory using the **copy tftp** command.

The following example shows how to download the PROM upgrade image **RFGW10-e-ios-rfgwufw-150-1r-SQ** from the remote host 172.20.58.78 to bootflash:

```
Switch# copy tftp: bootflash:
Switch# copy tftp bootflash:
Address or name of remote host [223.255.254.254]?
Source filename []? RFGW10-e-ios-rfgwufw-150-1r-SQ
Destination filename [RFGW10-e-ios-rfgwufw-150-1r-SQ]?
Accessing tftp://223.255.254.254/RFGW10-e-ios-rfgwufw-150-1r-SQ...
Loading RFGW10-e-ios-rfgwufw-150-1r-SQ from 223.255.254.254 (via TenGigabitEthernet2/3):
!!!!!!
[OK - 1296588 bytes]

1296588 bytes copied in 6.696 secs (193636 bytes/sec)
```

Step 5 On a dual-Supervisor system, copy the same ROMMON image to the standby Supervisor engine with the **copy bootflash:RFGW10-e-ios-rfgwufw-150-1r-SQ 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.

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:RFGW10-e-ios-rfgwufw-150-1r-SQ

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

```
rommon 1 >b bootflash:RFGW10-e-ios-rfgwufw-150-1r-SQ
loading image

 ************************************************************
 *                                                          *
 *     ROM Monitor/FPGA Upgrade for   WS-X45-SUP7-E System  *
 *                                                          *
 *     Copyright (c) 2008-2012 by Cisco Systems, Inc.       *
 *     All rights reserved.                                 *
 *                                                          *
 ************************************************************

 Upgrading image/FPGA... DO NOT RESET the system
 unless instructed or upgrade will fail !!!

Image Name : Cat4K_Mpc8572_Rommon_2MB
 Image size : 2097152 bytes

Uncompressing image.....
 Done!

Cat4K_Mpc8572_Rommon_2MB: Digitally Signed Development Software with key version A


 ********************************************************
 *        ** Now Upgrading Primary ROMMON Image **        *
 ********************************************************
 erasing... ******************************
writing... ******************************
reading... verifying...  Done!


Image Name : Cat4K_MOKA_CR1_Sig
 Image size : 692 bytes

Uncompressing image.....
 Done!

Image Name : Cat4K_MOKA_CR1_Fpga
 Image size : 594412 bytes

Uncompressing image.....
 Done!

Cat4K_MOKA_CR1_Fpga: Digitally Signed Development FPGA with key version A


Image Name : Cat4K_MOKA_CR1_Fpga
 Image size : 594412 bytes

Uncompressing image.....
 Done!

********************************************************
```

```
*            ** Now Programming FPGA Image **            *
*********************************************************
erasing... **********
writing... **********
reading... verifying...  Done!


Image Name : Cat4K_MOKA_CR1_Sig
 Image size : 692 bytes

Uncompressing image.....
 Done!

*********************************************************
*          ** Now Programming FPGA Signature **          *
*********************************************************
erasing... *
writing... *
reading... verifying...  Done!


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



*!*

*@*
```

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-standby Supervisor engine. After the system achieves an SSO state, repeat steps 6-8.

Step 10 Use the **show version** command to verify that you have upgraded the ROMMON:

```
switch# show version
rommon 1 >version
Primary Rom Monitor Version 15.0(1r)SQ(315)
 Compiled Mon 24-Sep-12 13:09 by mjagatap-rfgwk10_rommon

 Supervisor: RFGW-X45-SUP7-E  Chassis: WS-CABLE_RFGW
 CPU Rev: 2.2, Board Rev: 10, Board Type: 101
CPLD Joe  Rev: 10.0x3718.0xb565 Installed memory: 2048 MBytes
```

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 **RFGW10-e-ios-rfgwufw-150-1r-SQ** image from bootflash:

```
Switch# delete bootflash:RFGW10-e-ios-rfgwufw-150-1r-SQ
```

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

```
Switch# delete slavebootflash:RFGW10-e-ios-rfgwufw-150-1r-SQ
```

The ROMMON has now been upgraded.

Related Documentation

These documents are available for the Cisco RF Gateway 10 platform on Cisco.com:

- Cisco RF Gateway 10 Downstream 384 Line Card Hardware Installation Guide
- Configuring the Cisco RFGW-10 DS-384 Line Card
- Cisco RF Gateway 10 Hardware Installation Guide
- Cisco RF Gateway 10 Command Reference
- Cisco RF Gateway 10 Software Feature and Configuration Guide
- Cisco RF Gateway 10 MIB Specification Guide
- Cisco RF Gateway 10 Quick Start Guide

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, using the Cisco Bug Search Tool (BST), submitting a service request, and gathering additional information, see *What's New in Cisco Product Documentation* at: http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html.

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This document is to be used in conjunction with the documents listed in the "Related Documentation" section.