



Cisco RF Gateway 1 Software Release Notes, Release 1.03.09

Overview

Introduction

Software Release 1.03.09 is an SDV capable release for the Cisco® RF Gateway 1. In addition, software licensing is now required for enabling certain software features. This release continues to support Table Based Video, Wideband Data Specific and the Basic M-CMTS Data applications.

Purpose

The purpose of this document is to notify RF Gateway 1 users of data applications supported and enhanced capabilities. This document also provides upgrade procedures from the bridge release to the final release.

Audience

This document is intended for system engineers or managers responsible for operating and/or maintaining this product.

Related Publications

Refer to the following documents for additional information regarding hardware and software.


- *Cisco RF Gateway 1 Configuration Guide*, part number 4025112
- *Cisco RF Gateway 1 System Guide*, part number 4024958

Safe Operation for Software Controlling Optical Transmission Equipment

If this document discusses software, the software described is used to monitor and/or control ours and other vendors' electrical and optical equipment designed to transmit video, voice, or data signals. Certain safety precautions should be observed when operating equipment of this nature.

For equipment specific safety requirements, refer to the appropriate section of the equipment documentation.

For safe operation of this software, refer to the following warnings.

 **WARNINGS:**

- Ensure that all optical connections are complete or terminated before using this equipment to remotely control a laser device. An optical or laser device can pose a hazard to remotely located personnel when operated without their knowledge.
- Allow only personnel trained in laser safety to operate this software. Otherwise, injuries to personnel may occur.
- Restrict access of this software to authorized personnel only.
- Install this software in equipment that is located in a restricted access area.

In This Document

- Licensing 3
- MIB Handling..... 5
- Miscellaneous Fixes 6
- Upgrade Information 7
- IP Port Configuration Changes..... 8
- Upgrade Procedure for Customers Running 1.02.09..... 9
- IP Port Configuration Parameter Settings..... 11
- For Information 13

Licensing

After an upgrade to 1.03.09, a system license must be installed to access certain features. For information regarding RF Gateway 1 licensing requirements and procedures, refer to the *Cisco RF Gateway 1 Configuration Guide*, part number 4025112.

The following features require a system license.

- Third Party Encryption
- Data streams requiring use of the DOCSIS Timing Interface
- DVB Encryption
- PowerKEY® Encryption

Most systems delivered with 1.02.20 or later using a data part number included a license file pre-installed at the factory. For these systems, an FTP transfer is not necessary.

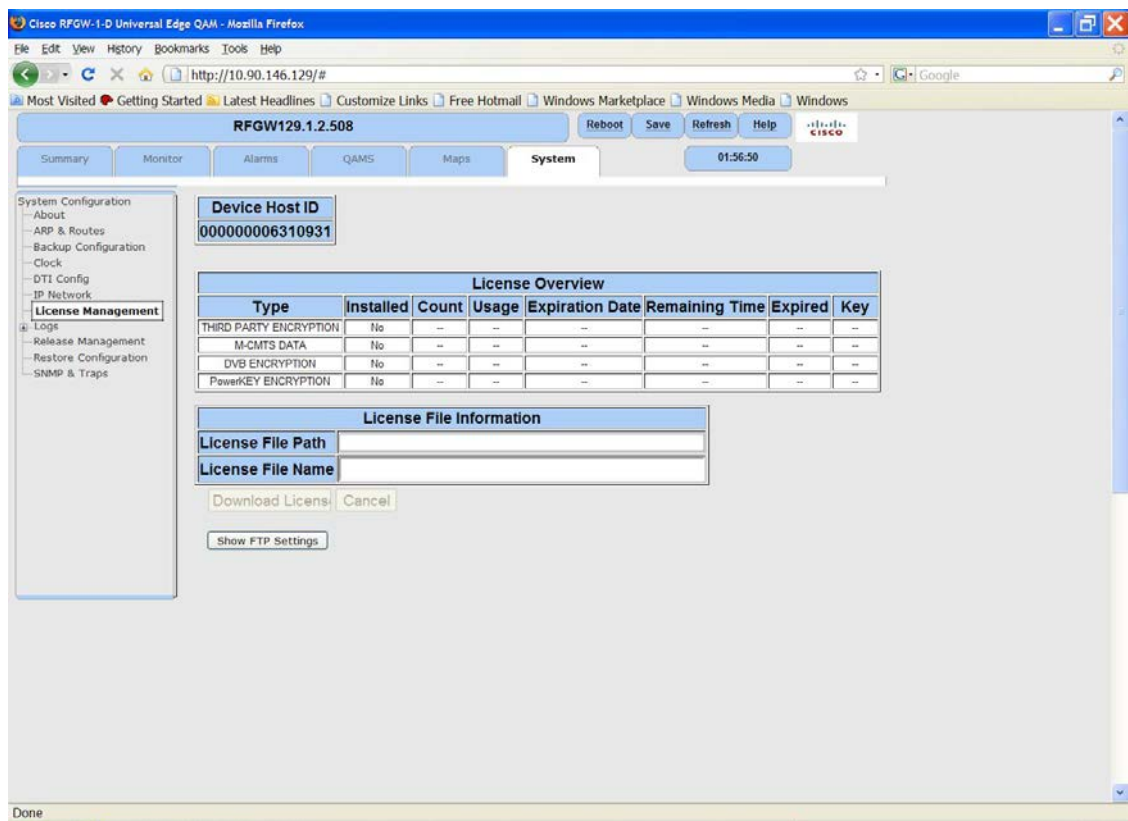
All systems delivered prior to 1.02.20 and some systems delivered with release 01.02.20 require a license file. This can be obtained from Cisco after an upgrade to 1.03.09. Contact your account representative for details on obtaining your license files.

Note: Performing an upgrade without a license file will generate an alarm, informing the user that a license file is not present. The unit will continue to function until configuration changes are made.

For systems requiring a license upgrade, a licensing capable RF Gateway 1 unit will provide the operator with a new tree menu, located under the System tab *License Management*. Refer to the following screen. It provides an FTP mechanism to transfer license files to the device.

Licensing

Note: The RF Gateway 1 will not immediately warn the operator if the FTP transfer fails due to an incorrect filename. It is recommended that the operator monitor the file transfer status using feedback from the FTP server.



The screenshot displays the Cisco RFGW-1-D Universal Edge QAM web interface in Mozilla Firefox. The browser address bar shows `http://10.90.146.129/#`. The interface title is "RFGW129.1.2.508" and includes navigation buttons for "Reboot", "Save", "Refresh", and "Help". A "System" tab is active, showing a time of 01:56:50. A left-hand navigation menu includes "System Configuration", "About", "ARP & Routes", "Backup Configuration", "Clock", "DTI Config", "IP Network", "License Management" (highlighted), "Logs", "Release Management", "Restore Configuration", and "SNMP & Traps".

The "License Management" section displays the "Device Host ID" as 00000006310931. Below this is a "License Overview" table:

Type	Installed	Count	Usage	Expiration Date	Remaining Time	Expired	Key
THIRD PARTY ENCRYPTION	No	--	--	--	--	--	--
M-CMITS DATA	No	--	--	--	--	--	--
DVB ENCRYPTION	No	--	--	--	--	--	--
PowerKEY ENCRYPTION	No	--	--	--	--	--	--

Below the table is the "License File Information" section, which includes input fields for "License File Path" and "License File Name", and buttons for "Download License" and "Cancel". A "Show FTP Settings" button is also present.

MIB Handling

The MIB improvements in 1.03.09 include access to the following MIBs.

- DOCS-IF MIB
- SNMP-V2 MIB
- RFGW1 PROPRIETARY MIB
- ENTITY MIB
- IF MIB

Miscellaneous Fixes

Minor bug fixes include the following.

- Stream Manager
- Stream Map
- Log Manager
- Web GUI

Upgrade Information

An RF Gateway 1 unit running 1.02.20 can be upgraded directly to 1.03.09. Refer to Chapter 3, *General Configuration and Monitoring (Release Management)* of the *Cisco RF Gateway 1 Configuration Guide*, part number 4025112 for more information.

The RF Gateway 1 reboots automatically at the end of the upgrade process. In order to upgrade from 1.02.09 to 1.02.20 and finally 1.03.09, a bridge release designated as 1.02.19 has been created to provide a secure and robust upgrade path. Releases 1.02.19 (bridge) and 1.02.20 (final) have identical user features and functionality. Refer to *Upgrade Procedure for Customers Running 1.02.09* (on page 9).



WARNING:

Upgrading to 1.02.20 or 1.03.09 directly from 1.02.09 must not be attempted. This may cause the RF Gateway 1 to be non-operational and returned to the factory.

IP Port Configuration Changes

There is a bug in 1.02.09 that results in the following IP port configuration parameters to have inverted values saved in the configuration file.

- Negotiation Mode (On/Off) - one for each port (total 4)
- Redundancy Mode (Auto/Manual) - one for each port pair (total 2)
- Revert Mode (Enable/Disable) - one for each port pair (total 2)

For details on these parameters, refer to Chapter 3, *General Configuration and Monitoring* of the *Cisco RF Gateway 1 Configuration Guide*, part number 4025112.

This bug has been corrected in the configuration file in 1.02.19. Upon upgrade to 1.02.19, these three parameters will appear to have changed value as seen in the *System/IP Network* page of the web GUI, and as a result, the IP ports may not be configured properly for operation immediately after upgrade (after the subsequent reboot that follows activation).

Refer to *Upgrade Procedure for Customers Running 1.02.09* (on page 9).

Upgrade Procedure for Customers Running 1.02.09

**WARNING:**

Upgrading to 1.02.20 directly from 1.02.09 must not be attempted. This may cause the RF Gateway 1 to become non-operational and returned to the factory.

- 1 Before starting the upgrade, backup the system configuration. Refer to Chapter 3, *General Configuration and Monitoring (Configuration Backup)* of the *Cisco RF Gateway 1 Configuration Guide*, part number 4025112. Name the file appropriately to identify it as a configuration that corresponds to 01.02.09. This file will be necessary later if the user decides to revert back to 01.02.09.
- 2 Record the IP Port Configuration parameters by saving a screen capture of the *System/IP Network* page. Refer to *Recording IP Port Configuration Settings* (on page 12).
- 3 Download and activate 1.02.19. Refer to Chapter 3, *General Configuration and Monitoring (Release Management)* of the *Cisco RF Gateway 1 Configuration Guide*, part number 4025112. The RF Gateway 1 reboots automatically at the end of the upgrade process.
- 4 After reboot, display the IP Port Configuration page. Refer to *Displaying IP Port Configuration Settings* (on page 11).
- 5 Verify the IP Port Configuration parameters by checking them against those recorded in step 2 (prior to the upgrade as done in step 3). The Negotiation Mode, Redundancy Mode, and Revert Mode parameter values are inverted. Refer to *Displaying IP Port Configuration Settings* (on page 11). Change the differing parameter values to match those recorded before download and activation. Be sure to click **Apply** after making your changes.
- 6 Once step 5 is completed, save the configuration which includes the IP Port Configuration parameters. Going forward, these values will not change.
- 7 Validate/qualify/soak release 1.02.19 in its application to establish confidence the release is operating at the same level as 1.02.09. In the very unlikely event service is impacted by 1.02.19, reverting back to 1.02.09 may be done to re-establish operations. If reverting back to 1.02.09 is necessary, the IP Port Configuration parameters must be swapped back and the configuration saved in step 2 restored.

Upgrade Procedure for Customers Running 1.02.09

- 8 After satisfactory completion of step 7, upgrade from 1.02.19 to 1.02.20. These two releases have identical performance and behavior. Release 1.02.20 includes a boot code upgrade that readily supports future roadmap features/releases without the need for subsequent two-step bridge upgrade processes.
- 9 Download and activate 1.03.09. Refer to Chapter 3, *General Configuration and Monitoring (Release Management)* of the *Cisco RF Gateway 1 Configuration Guide*, part number 4025112. The RF Gateway 1 reboots automatically at the end of the upgrade process.

IP Port Configuration Parameter Settings

Refer to Chapter 3, *General Configuration and Monitoring* of the *Cisco RF Gateway 1 Configuration Guide*, part number 4025112 for specific details.

Displaying IP Port Configuration Settings

Follow these instructions to display the *System/IP Network* page.

- 1 Launch your web browser.
- 2 In the IP Address field, enter the RF Gateway 1 IP address.
- 3 Click **Enter**.
- 4 Click the *System/IP Network* tab and review the IP settings. Refer to the following screen.

The screenshot shows the Cisco RF Gateway 1 web interface. The browser address bar displays `http://10.10.149.80/#`. The page title is "rfgw-1". The navigation tabs include Summary, Monitor, Alarms, CDM, Maps, and System. The System tab is active, and the time is 15:02.

The main content area is titled "IP Network" and contains several configuration sections:

- 10/100 Ports:** A table with columns for Management and Conditional Access.

	Management	Conditional Access
Port Control		Off
Address Selection Mode	Static	Static
MAC Address	00:50:4b:11:30:64	00:50:4b:11:30:65
IP Address	10.50.149.80	150.150.255.250
Subnet Mask	255.255.255.0	255.255.255.0
Default Gateway	10.50.149.1	150.150.255.254
- Port Pair Configurations:** A table with columns for Port Pair 1 and Port Pair 2.

	Port Pair 1	Port Pair 2
Video/Data IP	10.1.1.140	10.1.1.141
Redundancy Mode	Both	Manual
Primary Port	1	0
Current Active Port	1	0
Redundancy Configuration		
Detection Mode	Ethernet Link	Ethernet Link
LOS Timeout (s)	1	1
Revert To Primary	Enabled	Enabled
Revert Check Time (s)	0	0
- GbE Input Ports:** A table with columns for Port 1, Port 2, Port 3, and Port 4.

	Port 1	Port 2	Port 3	Port 4
Port Configuration	Dual Port Pairs			
MAC Address	00:50:4b:11:30:66	00:50:4b:11:30:67	00:50:4b:11:30:68	00:50:4b:11:30:69
IP Address	10.1.1.140	10.1.1.141	10.1.1.142	10.1.1.143
Subnet Mask	255.255.255.0	255.255.255.0	255.255.255.0	255.255.255.0
Negotiation Mode	On	On	On	On

Buttons for "Apply" and "Reset" are located at the bottom of the configuration sections.

Recording IP Port Configuration Settings

Follow these instructions to record IP port configuration settings.

- 1 Navigate to the *System/IP Network* page.
- 2 Click the **Alt-PrtScrn** keys to copy the IP Network parameter settings to the clipboard.
- 3 Launch Microsoft Word (or Word Pad if you don't have Microsoft Word) and paste the clipboard contents to page 1.
- 4 Save the Microsoft Word document as ipsettings.doc.

For Information

Support Telephone Numbers

If you have technical questions, call Cisco Services for assistance. Follow the menu options to speak with a service engineer.



Cisco Systems, Inc.
5030 Sugarloaf Parkway, Box 465447
Lawrenceville, GA 30042

678 277-1120
800 722-2009
www.cisco.com

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of cisco trademarks, go to this URL:
www.cisco.com/go/trademarks.

Third party trademarks mentioned are the property of their respective owners.
The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Product and service availability are subject to change without notice.

© 2009, 2012 Cisco and/or its affiliates. All rights reserved.

August 2012 Printed in USA

Part Number 7017818 Rev B