



Cisco RF Gateway 1 Software Release Notes, Release 5.01.05

Overview

Introduction

The Cisco RF Gateway 1 software version 5.01.05 supports DVB® Scrambling control and PowerKEY® Encryption.

Purpose

The purpose of this document is to notify RF Gateway 1 users of the enhancements included in the current release, and to inform users of any special upgrade procedures needed for using Release 5.01.05.

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.

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Simulcrypt/PowerKEY Support

The RF Gateway 1 software version 5.01.05 supports DVB Scrambling control and PowerKEY Encryption. See chapter 3, *General Configuration and Monitoring* of the *Cisco RF Gateway 1 Configuration Guide*, part number 4025112, for additional information.

The following list describes release 5.01.05 features.

- RF Gateway 1 Release 5.01.05 supports DVB Scrambling control
- PowerKEY Encryption is now supported
- Broadcast session operation (up to 48 QAM carriers)
- PowerKEY and DVB Scrambling licenses required
- DNCS 4.4.1 required for session setup
- EIS must be operating in an AC Reference Mode to configure scrambling

Known Issues

The following list identifies known limitations planned to be resolved as part of an upcoming GA release.

- The RF Gateway 1 Web interface is not fully tested with IE-8 and Firefox 3.5.x or newer. The RF Gateway 1 web management interface is tested with IE-6 or Firefox 2.0.0.14 and above. Use of Java 1.6.x is also recommended.
- When using /31 IP addressing, although the RF Gateway 1 allows setting IP addresses and masks that correspond to this point-to-point protocol, it will not respond to ICMP ping requests.

Licensing

After an upgrade to 5.01.05, users do not have access to 96 QAM channel support (8 channels per port). For information regarding RF Gateway 1 licensing requirements and procedures, see the *Cisco RF Gateway 1 Configuration Guide*, part number 4025112.

The following features require a system license:

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

If licenses are not pre-installed at the factory, activation of the features listed above requires that a license file be obtained from Cisco after an upgrade to 5.01.05. Contact your account representative for details on obtaining your license files.

Note: Performing an upgrade without a license file will not affect the configuration of a chassis already operating in release 1.03.X, 2.02.X, or 1.02.X. The unit continues to function as configured earlier until any configuration or license changes are made. No alarms or warnings are currently present that indicate the absence of the 8 channel per port license.

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

The screenshot shows the web interface for 'rfgw1'. The top navigation bar includes buttons for Login, Reboot, Save, Refresh, and Help, along with a Cisco logo and the time 16:08:05. The main navigation tabs are Summary, Monitor, Alarms, QAMS, Maps, and System (which is selected). The System tab is active, showing a sidebar with a tree menu where 'License Management' is highlighted. The main content area displays the 'Device Host ID' as 000000006311020. Below this is a 'License Overview' table with columns for Type, Installed, Count, Usage, Expiration Date, Remaining Time, Expired, and Key. The table lists three licenses: DATA, DVB_SCRAMBLING, and 8_CHANNELS_PER_PORT. Below the table is a 'License File Information' section with fields for License File Path and License File Name, and buttons for Download License and Cancel.

Type	Installed	Count	Usage	Expiration Date	Remaining Time	Expired	Key
DATA	Yes	1	0	00-000-0000	0	No	7E4164E829C42CD5AFEF8EE0CC9A1EA4
DVB_SCRAMBLING	Yes	1	1	00-000-0000	0	No	60EC997598F5FBF00F438AB4C7B06F2F
8_CHANNELS_PER_PORT	Yes	1	1	00-000-0000	0	No	6525539400A24111EFB92CA9F518D5E2

License File Information

License File Path: /SW_Release/License/

License File Name: 6311020_AllThree_Ravi_license.dat

Download License Cancel

Upgrade Information

An RF Gateway 1 unit running release 1.02.20 or higher can be upgraded directly to 5.01.05. 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. However, when upgrading to 5.01.05 from 1.02.09, an intermediate step of using the bridge release 1.02.19 to arrive at 1.02.20 and finally 5.01.05 must be followed. The 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.



WARNING:

Upgrading to 1.02.20 or 5.01.05 directly from 1.02.09 must not be attempted. This may cause the RF Gateway 1 to be non-operational.

Software Release 5.01.05 Miscellaneous Enhancements

The following list identifies all 5.01.05 software enhancements. These items refer to incidents recorded in the Issue Management Utility.

Item	Enhancement
114309	Added debug functions to help detect pid errors.
114410	Added debug for V3 createsession failures.
114444	Corrected PAT playout CRC error for initial PAT.
114460	Corrected GUI error in Monitor page resulting from too much data information.
115762	Corrected PK private data increment for SCARD.
115776	Improved debug functions qpiderrors, qpiderrorshex, qpiderrorsall, and qpiderrorsallhex.

IP Port Configuration Parameter Settings

The RF Gateway 1 has four physical GbE input ports that receive video and data streams from the upstream network. These ports may be used independently (in software releases 02.02.11 or later) or configured to implement input redundancy. See Chapter 3, *General Configuration and Monitoring of the Cisco RF Gateway 1 Configuration Guide*, part number 4025112 for 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. See the following screen.

The screenshot shows the Cisco RF Gateway 1 web interface. The top navigation bar includes tabs for Summary, Monitor, Alarms, QAMS, Maps, and System. The System tab is selected. The left sidebar shows a tree view of configuration options, with IP Network selected. The main content area displays the IP Network configuration page. The 10/100 Ports section shows settings for Management and Conditional Access. The GbE Input Ports section is highlighted with a red box and contains the following configuration:

GbE Input Ports				
GbE Data Port Mode	Dual Port Pairs			
Port Configuration	Port 1	Port 2	Port 3	Port 4
MAC Address	00:50:4b:11:20:9e	00:50:4b:11:20:af	00:50:4b:11:20:b0	00:50:4b:11:20:b1
IP Address	76.59.89.129	150.158.235.252	76.59.91.195	150.158.234.250
Subnet Mask	255.255.255.248	255.255.255.252	255.255.255.248	255.255.255.252
Negotiation Mode	On	On	On	On
Port Pair Configuration	Port Pair 1		Port Pair 2	
Video/Data IP	76.59.89.130		76.59.91.194	
Redundancy Mode	Manual		Manual	
Primary Port	1		3	
Current Active Port	1		3	
Redundancy Configuration				
Detection Mode	Ethernet Link		Ethernet Link	
LOS Timeout (s)	1		1	
Revert To Primary	Enabled		Enabled	
Revert Check Time (s)	2		2	

At the bottom of the page, there are buttons for Apply and Reset.

Recording IP Port Configuration Settings

Follow these instructions to record the 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 WordPad if you don't have Microsoft Word) and paste the clipboard contents to page 1.
- 4 Save the Microsoft Word document as ipsettings.doc.



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