Cisco RF Gateway 1 Software Release 5.01.13 Release Note

Overview

Introduction

RF Gateway 1 (RFGW-1) software release 5.01.13 contains several improvements and new features, as summarized at the end of this document.

New features include:

- Automatic session refresh after transient ES PID conflicts are cleared.
- Enhanced logging and traps for PID conflict and session refresh.
- Automatic adjustment of fan speed based on measured temperature.

Purpose

The purpose of this document is to notify RFGW-1 users of the enhancements included in the current release, and to inform users of any special upgrade procedures needed for using RFGW-1 software release 5.01.13.

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 78-4025112-01
- *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

New Features

Important: Before proceeding, we strongly recommend that you read or review the notes on PID conflicts found in **Downloading System Release Images** in the Configuration chapter of the *Cisco RF Gateway 1 Configuration Guide*, part number 78-4025112-01.

Auto Session Refresh

When the RFGW-1 detects an input PID conflict, in some cases, simply correcting the PID conflict is not enough to recover the session. There are some transient ES PID conflict scenarios from which the RFGW-1 does not recover. To handle these situations, an automatic session refresh is done on the MPTS stream. This ensures all the sessions on the MPTS stream are rebuilt properly without operator interference.

Logging and Trap Enhancements

- Logs in Terse Mode, when PID conflict is detected or cleared.
- Logs and Traps when session refresh is automatically or by the operator.

Smart Fan Control Option

The previous RFGW-1 release set the fan to run at full speed (setting is 255) regardless of temperature. In response to customer comments regarding fan noise levels, the current release adds the option of fan speed control based on temperature.

This feature has the following key design elements:

- The **Smart Fan Control** option is added to the System page of the RFGW-1 GUI. It has two possible states:
  - **Enabled** – The fan speed changes based on measured temperatures.
  - **Disabled** – The fan always runs at full speed.

  This feature is **Disabled** by default. When set to **Enabled**, Smart Fan Control waits 30 seconds before changing fan speed to avoid any fan-related alarms. Disabling Smart Fan Control makes all fans operate at full speed immediately.
- This feature flag is unit-specific and is not carried forward to other units when using the backup configuration file.
- During RFGW-1 bootup, the fan runs at full speed (setting 255) for at least 5 minutes. This allows the boot process to be completed and the RFGW-1 to be configured completely.
- Temperature readings are taken every 10 seconds from various measuring points, and the highest reading is recorded.

- If temperature increases, the fan speed increases immediately to the specified setting (see **Fan Speed Settings** below). Fan speed is automatically reduced 10 minutes after the increase in order to reduce toggling of the fan speed, thereby increasing fan life.
- Alarms are raised based on the speed/RPM out of tolerance (existing design).
- If very low-speed fan operation or outright fan failure is detected, the software kick starts all fans at full speed (255).
- Fail-safe mechanisms are in place when the software fails or hangs. This feature is addressed in bug CSCui14544; see ***Bug Toolkit*** (on page 6).

Fan Speed Settings

Based on the temperature, fan control settings will vary from 150 to 175 and from 175 to 255, as shown in the following table. GUI logs keep track of these changes.

Fan Control Setting	Highest Temperature (Degrees Centigrade)
150	< 65
175	≥ 65 and < 74
255	≥ 74

Known Issues

The following are known issues in this release.

- The RFGW-1 Web interface is not fully tested with IE-8 and FireFox 3.5.x or newer. The RFGW-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 RFGW-1 allows setting IP addresses and masks that correspond to this point-to-point protocol, it will not respond to ICMP ping request.

Bug Toolkit

Follow these instructions to log on to the Bug Toolkit. After you have logged on, you can search for all bugs in this release, search for a specific bug or search, for bugs using specific criteria.

1. Go to **http://www.cisco.com/cgi-bin/Support/Bugtool/launch_bugtool.pl**.
2. When prompted, log on with your user name and password. The Bug Toolkit page opens.

   Note: If you have not set up an account on Cisco.com, click **Register Now** and follow the on-screen instructions to register.

Search for a Specific Bug

1. In the **Search for Bug ID** field, enter the ID of the bug you want to view and click **Go**.
2. The Bug Toolkit displays information about the bug in the **Search Bugs** tab.

Search for All Bugs in This Release

1. To search for all the bugs in this release, enter the following search criteria in the **Search Bugs** tab:
   - Select Product Category: Select **Video**.
   - Select Products: Select **Cisco RF Gateway Series**.
   - Software Version: Select **6.1** to view the list of bugs in this release.
2. Click **Search**. The Bug Toolkit displays the list of bugs for this release.

Upgrade Information

An RFGW-1 unit running release 1.02.20 or higher can be upgraded directly to 5.01.13. Refer to **Release Management** in the Configuration chapter of the *Cisco RF Gateway 1 Configuration Guide*, part number 78-4025112-01 for more information.

The RFGW-1 reboots automatically at the end of the upgrade process. However, when upgrading to 5.01.13 from 1.02.09, an intermediate step is required: use bridge release 1.02.19 to upgrade to final release 1.02.20, and from there, to 5.01.13. The bridge release designated as 1.02.19 has been created to provide a secure and robust upgrade path. Bridge release 1.02.19 and final release 1.02.20 have identical user features and functionality.

WARNING:

Do not attempt to upgrade to 1.02.20 or 5.01.13 directly from 1.02.09, as this may cause the RFGW-1 to become non-operational.

Release 5.01.13 Update Summary

The following table summarizes the improvements and new features in release 5.01.13. For more information, see ***Bug Toolkit*** (on page 6).

ID	Severity	Title	Description
CSCui145443	Severe	RFGW-1: Variable FAN Speed Control	Variable FAN Speed control. Control the FAN speed based on the controller board junction (3 FPGAs) and QAM card temperatures. Critical temperatures comprised of: ■ Controller Board Junctions (highest of 3 FPGAs). ■ QAM Card temperatures (cards 1 through 6).
CSCuj28536	New Feature	Auto Session Refresh for Transient ES PID Conflicts in CVC	■ RFGW initiates Session Refresh if PID conflict is cleared. RFGW will detect and monitor input PID conflict streams every 15 seconds. ■ Input PID conflict clearing and auto session refresh to be limited to this bypass transient condition. From the RFGW perspective, this is an ES-ES PID conflict. ■ Add trap and log for auto session refresh and GUI (manual) session refresh. Add logs for PID conflict conditions at Terse mode.

For Information

If You Have Questions

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

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October 2013 Part Number OL-30672-01