



Cisco RF Gateway 1 Licensing for Data Applications Technical Bulletin

Overview

Introduction

The Cisco® RF Gateway 1 supports simultaneous video and data functionality. In order to utilize Downstream External PHY Interface (DEPI) functionality for data flows carried across the RF Gateway 1, a software license is required in software releases 1.03.09 or later. This license will be resident on the chassis, and is simple to install using an FTP server. No license server is required after installation. Not all license files have been pre-installed at the factory for all units ordered under a data part number.

Purpose

This technical bulletin describes how to obtain license files for units that do not have a pre-installed license file. In addition, it describes applications for which licensing is necessary, serial numbers affected and how to install, activate and verify the license file.

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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Description

When operating the RF Gateway 1 without a software license, the customer may encounter an *Unlicensed Data Feature In Use* alarm. Refer to the *Alarms* box in the following screen.

Note: The unit will continue to function as the alarm is displayed until configuration changes are made.

If the unit was purchased under a data-capable part number, refer to *Known Serial Numbers* (on page 4) to see if your serial number is affected. If the unit was purchased under a video-capable part number, contact your account team to purchase a certificate key to upgrade.

The screenshot displays the Cisco RFGW-1-D Universal Edge QAM web interface in Mozilla Firefox. The browser address bar shows the URL `http://10.90.146.129/#`. The interface title is "RFGW129.1.2.508" and includes navigation buttons for "Reboot", "Save", "Refresh", and "Help". A "Summary" tab is selected, showing various monitoring sections:

- Output B/W:** A table showing output bandwidth for RF Port 1 and RF Port 2 across 6 cards. All values are 0.0000 (0%).
- Input B/W:** A section for GbE ports (Pair 1 and Pair 2) with four active ports (GbE 1, 2, 3, 4) showing 0.00 Mbps.
- Statistics:** A table showing Received/Transmitted data for GbE 1, 2, 3, and 4.

	GbE-1	GbE-2	GbE-3	GbE-4
Bytes	0B	0B	0B	0B
192B	64B	0B	0B	0B
Error Packets	0	0	0	0
Unicast Packets	0	0	0	0
Multicast Packets	0	0	0	0
Discarded Packets	0	0	0	0
- Alarms:** A table showing an active alarm:

Severity	Time	Description
Major	06 FEB 09 00:05:45	Unlicensed Data Feature In Use

At the bottom of the interface, there is a hardware status diagram showing the physical components of the device.

Known Serial Numbers

A number of units were purchased using a data-capable part number and do not have a pre-installed license file. We have identified these units, and their serial numbers are listed below. If your serial number is affected, follow the steps in *Data-Capable RF Gateway 1 with Pre-installed License File* (on page 7) to obtain a license file. After obtaining the license file, follow the procedures in *Installing and Activating a License File* (on page 18).

6311296	6319617	6324862	6336242	6340031
6314086	6319664	6324863	6336246	6343534
6314494	6319667	6324865	6336248	6343591
6314663	6319676	6324866	6336256	6343802
6315259	6319689	6324888	6336263	6343810
6315398	6319691	6324889	6336264	6343811
6315402	6321245	6324891	6336268	6343842
6315404	6321246	6324897	6336282	6343844
6315405	6321255	6326526	6336361	6343846
6315411	6321257	6326529	6336363	6343852
6315414	6321261	6326532	6336364	6343855
6315417	6321263	6326541	6339002	6343859
6315419	6321271	6326547	6339003	6343861
6315421	6321279	6326550	6339005	6343863
6315429	6321287	6326553	6339009	6343870
6315432	6321292	6326555	6339011	6343871
6315449	6321294	6326559	6339014	6343875
6315452	6323141	6326563	6339016	
6315468	6323142	6326564	6339018	
6315469	6323144	6328158	6339021	
6315470	6323145	6328167	6339022	
6315471	6323146	6328181	6339023	
6315474	6323148	6331864	6339031	
6315475	6323149	6331888	6339032	
6316409	6323152	6331894	6339034	
6316810	6323153	6331940	6339041	
6316818	6323159	6331983	6339042	
6316822	6323160	6332694	6339043	

Known Serial Numbers

6316823	6323271	6332868	6339045
6316824	6323272	6332888	6339053
6316825	6323276	6334210	6339055
6316830	6323282	6334212	6339065
6316831	6323285	6334224	6339066
6317682	6323298	6334233	6339067
6317683	6323308	6334235	6339073
6319595	6323309	6334259	6339077
6319597	6323311	6334275	6339087
6319608	6323316	6336226	6340019
6319611	6324851	6336228	6340025
6319612	6324856	6336230	6340029

Applications Requiring a Data License

A data license is required for using DEPI functionality on software releases 1.03.09 or later. DEPI data flows are typically used for carrying primary DOCSIS channels over the edge QAM. DEPI flows may also be used for bonded channels, but bonded channels are not required to use the DEPI protocol.

The base RF Gateway 1 platform may still be used for "MPEG" data flows without a license. These types of flows are typically used in the "Cisco Wideband" application, in which the primary channel is sourced from the CMTS and bonded channels flow through the edge QAM.

Note: It is recommended that the user backup the configuration before performing any software upgrade, including license file installation.

Obtaining a Data License

The following sections describe the steps necessary to obtain a license file for the following scenarios:

- RF Gateway 1 purchased using a data-capable part number with pre-installed license file
- RF Gateway 1 purchased using a data-capable part number without pre-installed license file
- RF Gateway 1 purchased using a base functionality (video-capable) part number

Note: If you are not sure whether you have a pre-installed license file, it will become clear after an upgrade to 1.03.09 software.

Data-Capable RF Gateway 1 with Pre-installed License File

For customers who have purchased a data-capable RF Gateway 1, no action is required. The license file has already been installed and activated. To verify the installation of the license file, refer to the *System/License Management* page of the GUI. Refer to the following screen.

The screenshot shows the Cisco RFGW-1-D Universal Edge QAM GUI. The main content area displays the following information:

Device Host ID: 000000006310931

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

Below the table is the License File Information section:

License File Path:

License File Name:

Buttons: Download License, Cancel, Show FTP Settings

Data-Capable RF Gateway 1 without Pre-Installed License File

For customers who have purchased a data-capable RF Gateway 1 without a pre-installed license file, and have upgraded to 1.03.09, you will encounter an alarm. You will need to obtain a license file.

Note: The unit will continue to function as the alarm is displayed until configuration changes are made. This will not affect your service.

Procedure for Obtaining a License

Follow the steps below to obtain a license.

- 1 Verify your unit's licensing status. Navigate to the RF Gateway 1 **System/License Management** page.

Result: The following page is displayed.

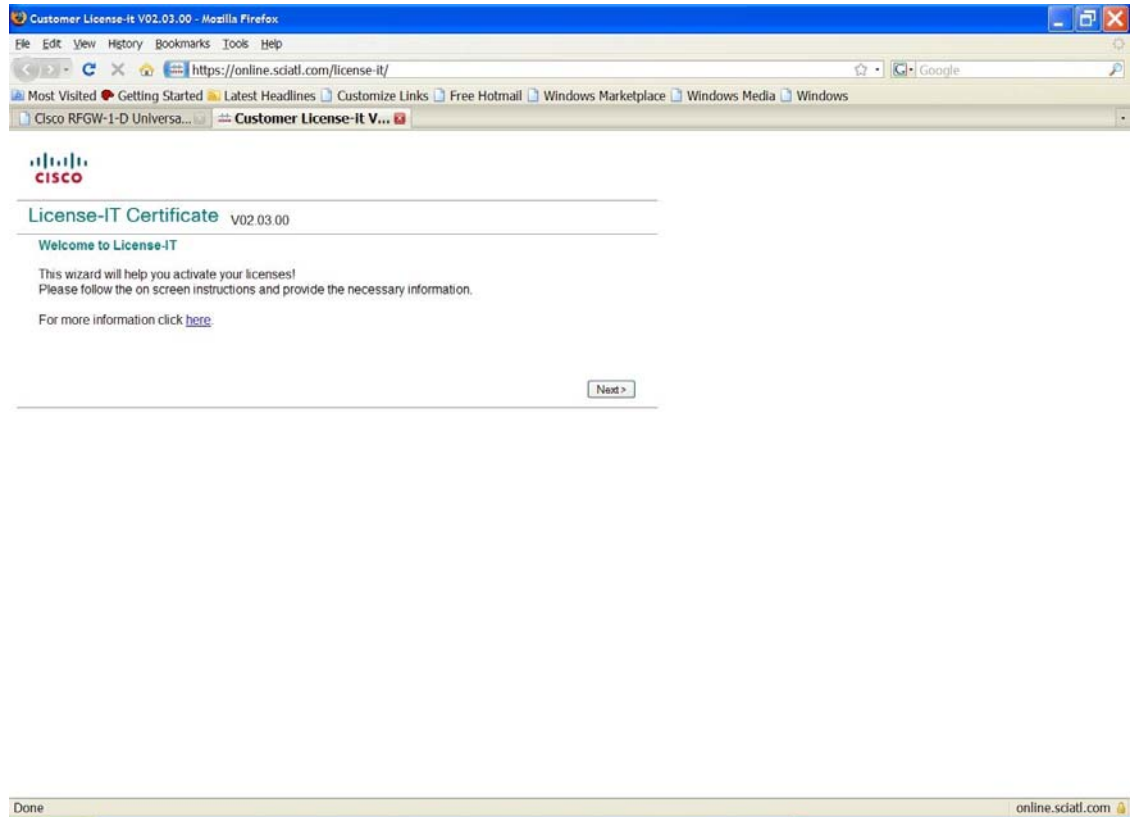
The screenshot shows the Cisco RFGW-1-D Universal Edge QAM web interface. The browser address bar shows <http://10.90.146.129/#>. The page title is "RFGW129.1.2.508". The "System" tab is selected, and the "License Management" sub-tab is active. The "Device Host ID" is displayed as 00000006310931. The "License Overview" table is as follows:

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

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

- 2 Using the device serial number, obtain the license file from the Cisco license web application at <https://online.sciatl.com/license-it>.

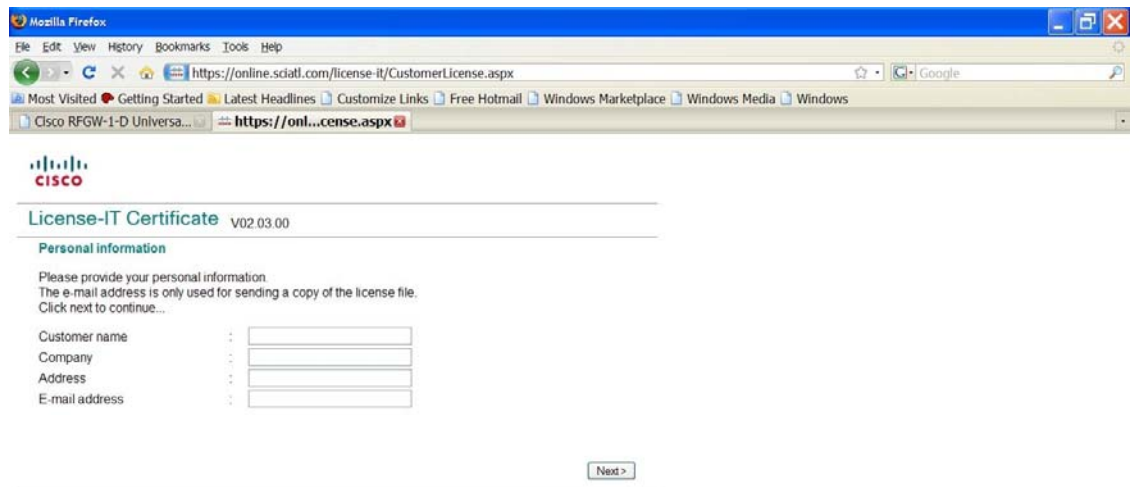
Result: The following page is displayed.



3 Click Next.

Obtaining a Data License

Result: The following page is displayed.



License-IT Certificate v02.03.00

Personal information

Please provide your personal information.
The e-mail address is only used for sending a copy of the license file.
Click next to continue...

Customer name :

Company :

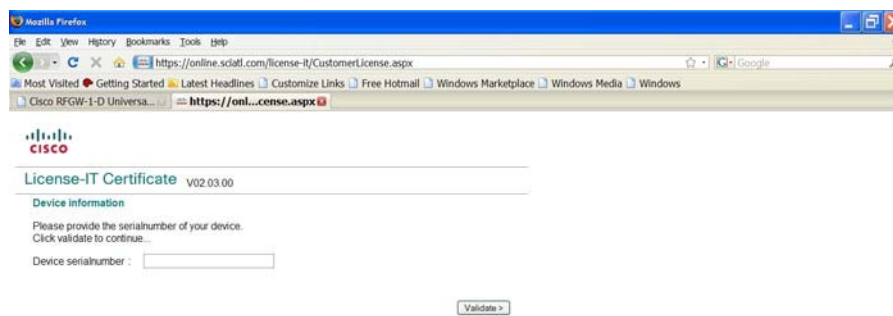
Address :

E-mail address :

Next >

- 4 Enter your personal information.
- 5 Click Next.

Result: The following page is displayed.



License-IT Certificate v02.03.00

Device information

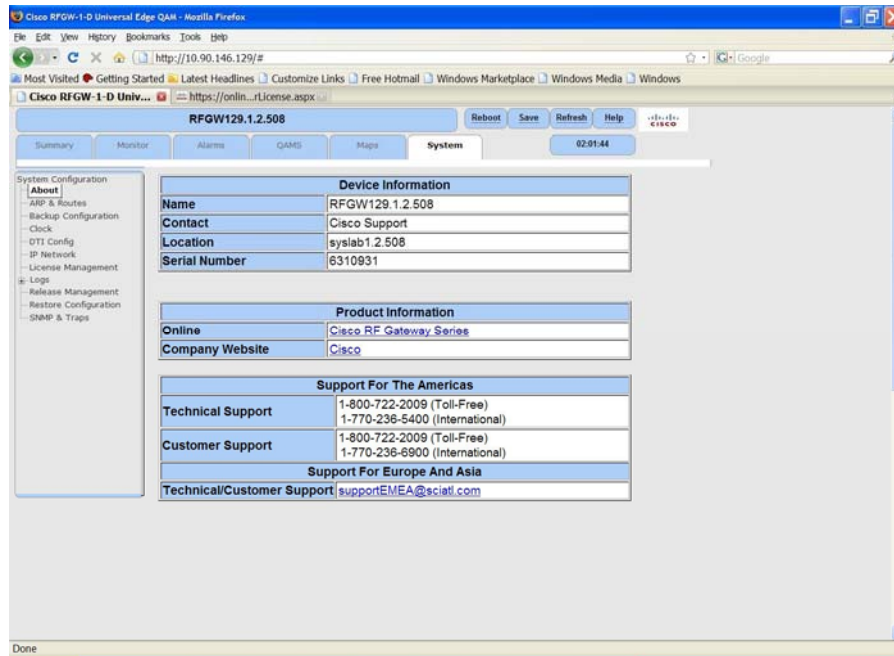
Please provide the serialnumber of your device.
Click validate to continue...

Device serialnumber :

Validate >

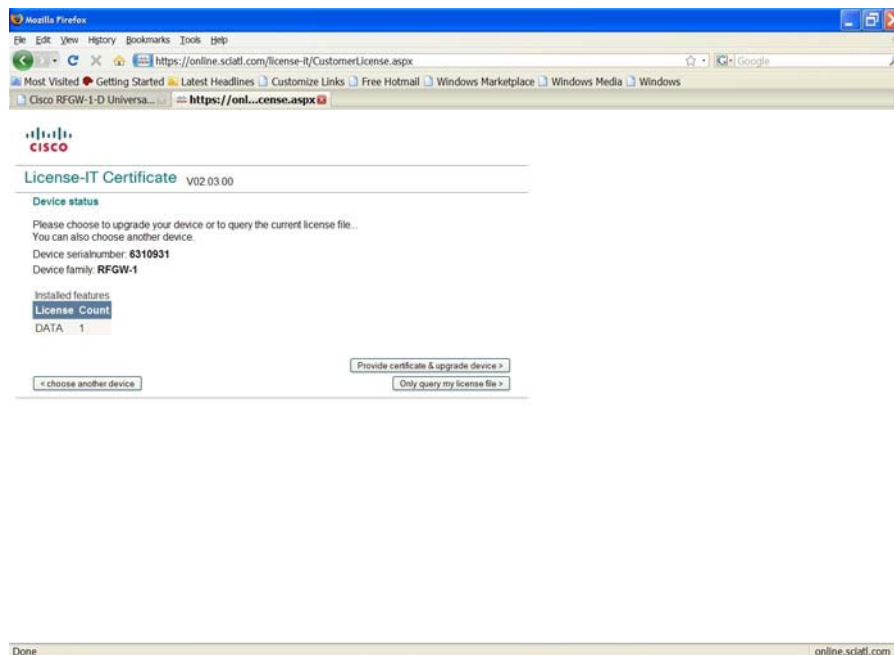
- 6 Enter the serial number of the RF Gateway 1 you wish to license.

Note: The serial number can be found on the *System/About* page of the RF Gateway 1 GUI. Refer to the following screen.



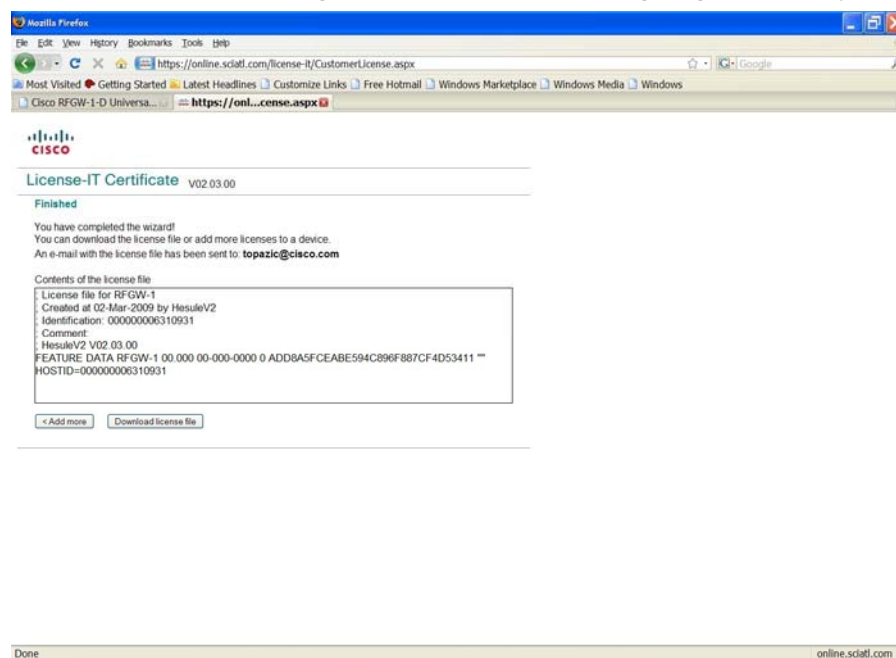
7 Click **Validate**.

Result: The following page is displayed. In this example, the RF Gateway 1 has been licensed for data.



8 Click **Only query my license file**.

Result: After confirming the action, the following page is displayed.



9 Click **Download license file**.

Note: The license file is ready to be activated and will be e-mailed to you at the e-mail address provided on the *Personal information* page. Refer to *Installing and Activating a License File* (on page 18).

Video-Capable RF Gateway 1

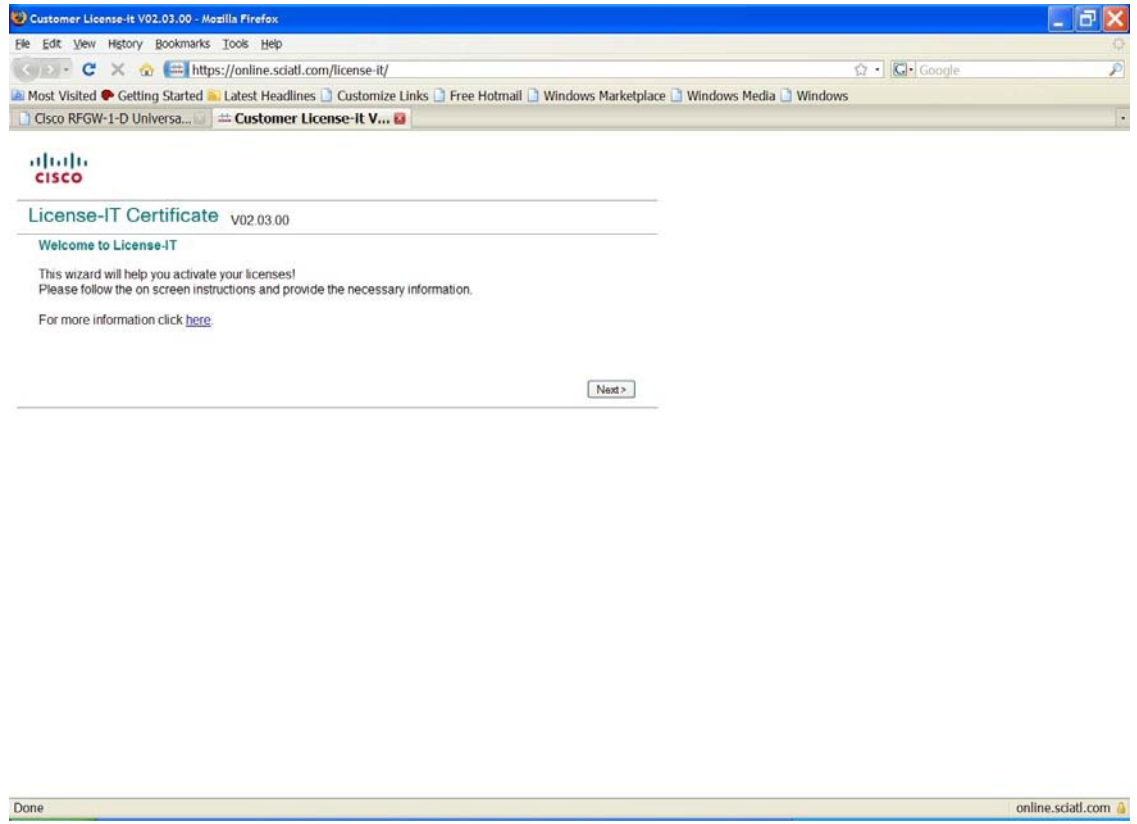
For customers who have purchased a video-capable RF Gateway 1 and wishes to upgrade to 1.03.09, it will be necessary to purchase the license file. In addition, a certificate key used for obtaining license files to upgrade to data functionality may be purchased by contacting your Cisco account team.

Procedure for Obtaining a License

Follow the steps below to obtain a license.

- 1 Using the certificate key and device serial number, obtain the license file from the Cisco license web application at <https://online.sciatl.com/license-it>.

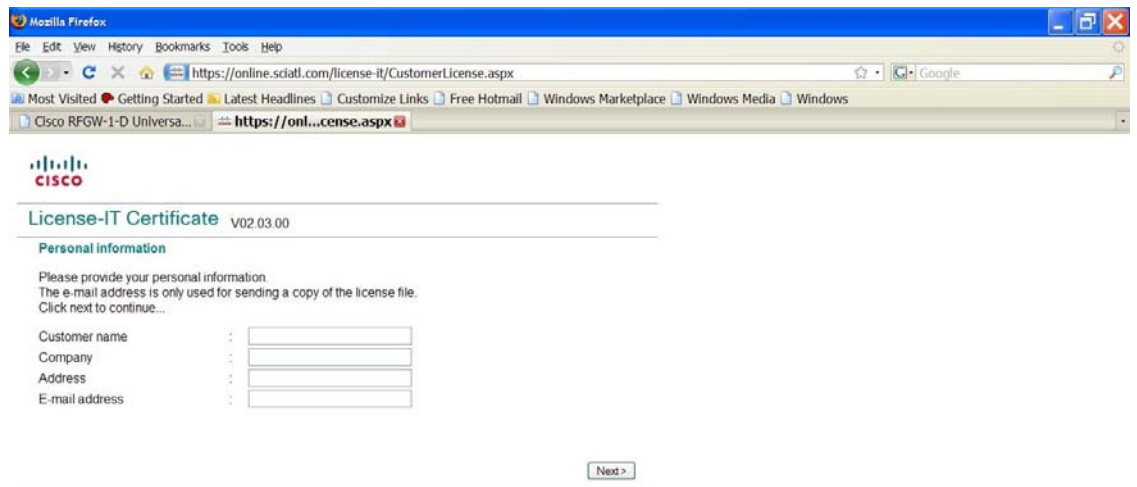
Result: The following page is displayed.



2 Click Next.

Obtaining a Data License

Result: The following page is displayed.



License-IT Certificate v02.03.00

Personal information

Please provide your personal information.
The e-mail address is only used for sending a copy of the license file.
Click next to continue...

Customer name :

Company :

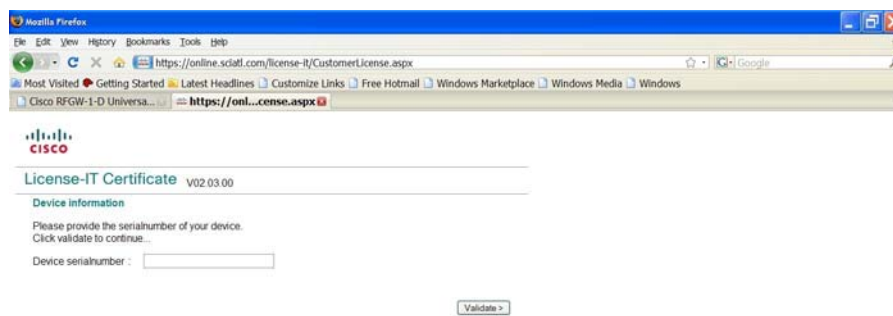
Address :

E-mail address :

Next >

- 3 Enter your personal information.
- 4 Click **Next**.

Result: The following page is displayed.



License-IT Certificate v02.03.00

Device information

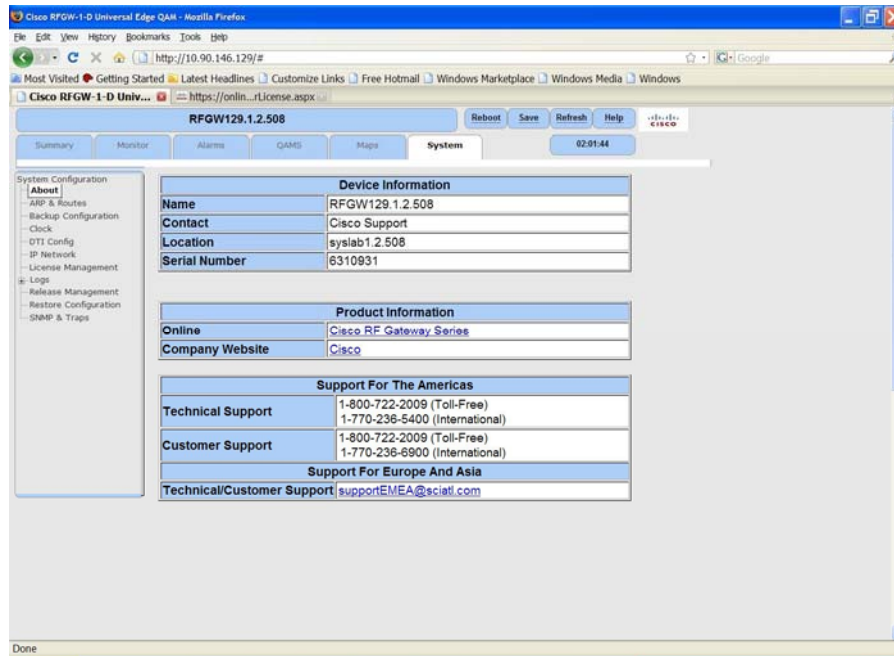
Please provide the serialnumber of your device.
Click validate to continue...

Device serialnumber :

Validate >

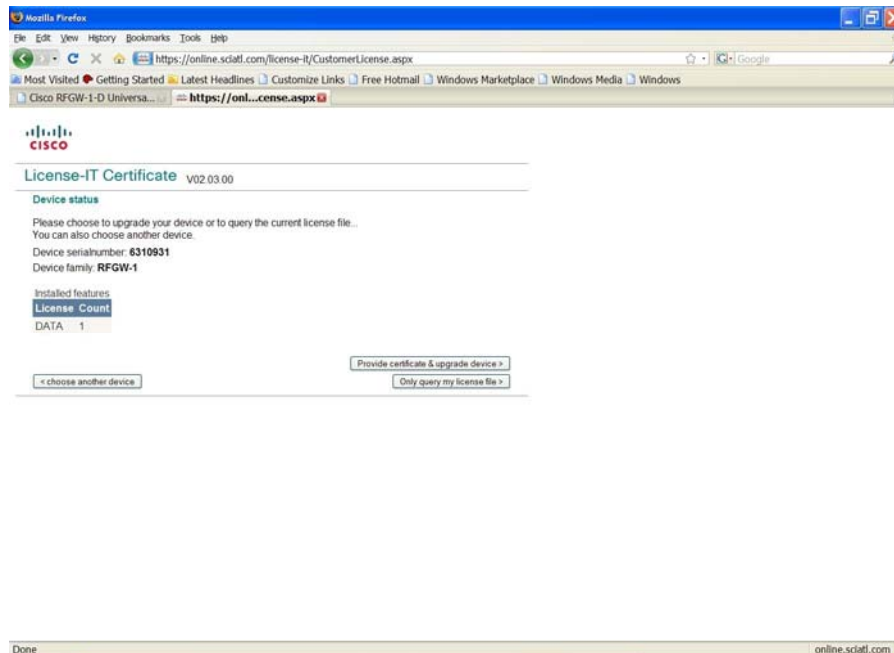
- 5 Enter the serial number of the RF Gateway 1 you wish to license.

Note: The serial number can be found on the *System/About* page of the RF Gateway 1 GUI. Refer to the following screen.



6 Click **Validate**.

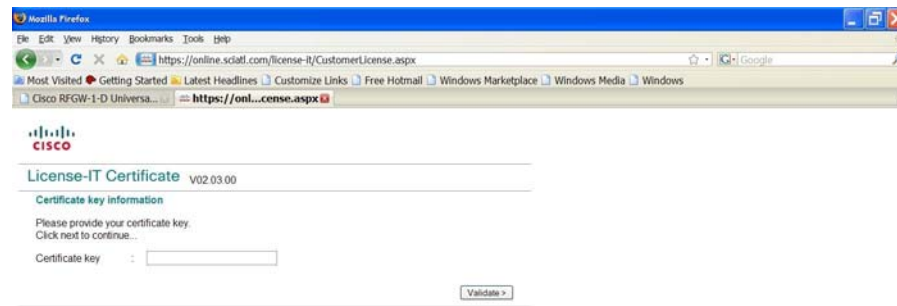
Result: The following page is displayed. In this example, the RF Gateway 1 has been licensed for data.



7 Click **Provide certificate & upgrade device**.

Obtaining a Data License

Result: The following page is displayed.

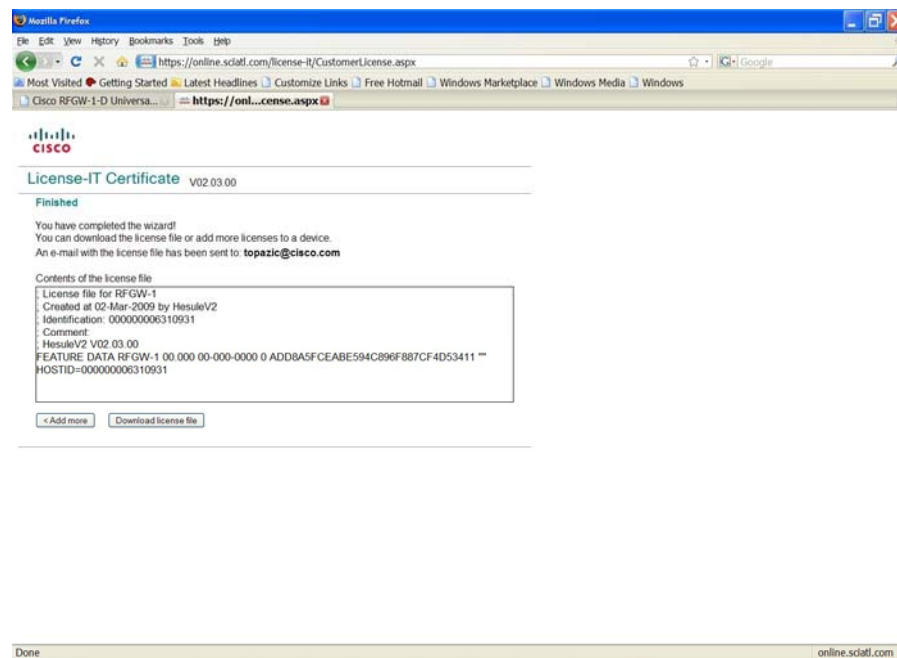


- 8 Enter the certificate key.
- 9 Click **Validate**.

Result: You will be taken to a page that displays your certificate key and the number of licenses available for that key.

- 10 At the prompt, enter the quantity (1) of licenses to generate.
- 11 Click **Next**.

Result: The following page is displayed.



- 12 Click **Download license file**.

Note: The license file is ready to be activated and will be e-mailed to you at the e-mail address provided on the *Personal information* page. Refer to *Installing and Activating a License File* (on page 18).

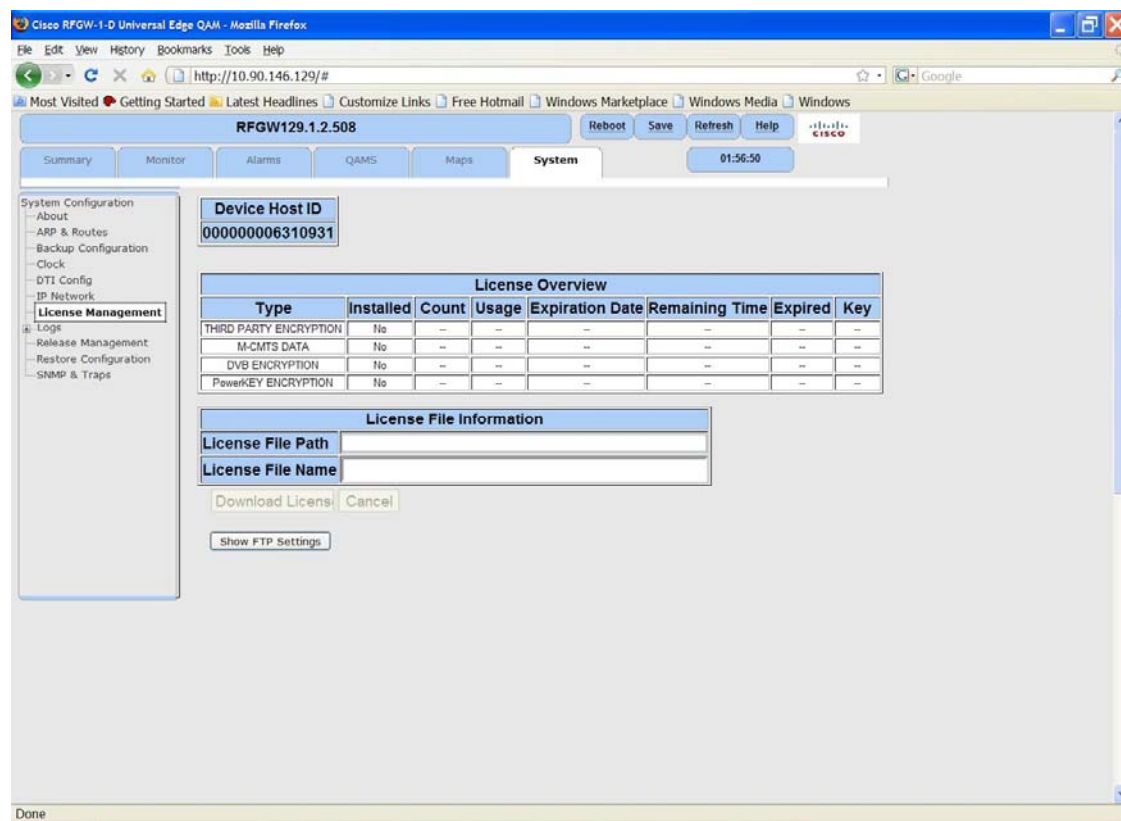
Installing and Activating a License File

To install and activate the license file using the GUI, the RF Gateway 1 must be upgraded to 1.03.09 or later. It is recommended that the user backup the unit's configuration prior to upgrade. Once the upgrade is complete, use the *System/License Management* page to install and activate the data license file. The license file will be installed via FTP. An external FTP server will be required.

Follow the instructions below to install and activate a license.

- 1 Navigate to the *System/License Management* page.

Result: The following page is displayed.



- 2 Click **Show FTP Settings** at the bottom of the window.

Result: The following page is displayed.

Configuration FTP Server

Server IP Address	<input style="width: 90%;" type="text"/>
User Name	<input style="width: 90%;" type="text"/>
Password	<input style="width: 90%;" type="password"/>

TP570

- 3 Enter the FTP server's IP address, user name and password.
- 4 Click **Apply**.
- 5 Click **Test FTP Connection**. Verify your connection with the FTP login success popup.
Note: If a failure occurs, recheck the IP address, user name and password.
- 6 Click **Save**.
- 7 In the *License File Path* text box, enter the path on the FTP server to the license file.
Example: /rfgw-1-d/data_license/6310931
- 8 In the *License File Name* text box, enter the name of the license file.
Example: license.dat.000000006310931.txt
- 9 Click **Download License** to initiate download of the license file.

Notes:

- If download failure occurs, recheck the path to the license directory and the filename.
- In 1.03.09, the unit 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.

Activating the License

Follow the instructions below to activate the license.

- 1 Click **Reboot** in the upper right corner of the GUI.
Note: Reboot is required.
- 2 Confirm the installation by accessing the *System/License Management* page.

Note: For support, contact Cisco technical support.

For Information

Support Telephone Numbers

This table lists the Technical Support and Customer Service numbers for your area.

Region	Centers	Telephone and Fax Numbers
North America	Cisco Services Atlanta, Georgia United States	<p>For <i>Technical Support</i>, call:</p> <ul style="list-style-type: none"> ■ Toll-free: 1-800-722-2009 ■ Local: 678-277-1120 (Press 2 at the prompt) <p>For <i>Customer Service</i> or to request an RMA number, call:</p> <ul style="list-style-type: none"> ■ Toll-free: 1-800-722-2009 ■ Local: 678-277-1120 (Press 3 at the prompt) ■ Fax: 770-236-5477 ■ E-mail: customer.service@sciatl.com
Europe, Middle East, Africa	Belgium	<p>For <i>Technical Support</i>, call:</p> <ul style="list-style-type: none"> ■ Telephone: 32-56-445-197 or 32-56-445-155 ■ Fax: 32-56-445-061 <p>For <i>Customer Service</i> or to request an RMA number, call:</p> <ul style="list-style-type: none"> ■ Telephone: 32-56-445-444 ■ Fax: 32-56-445-051 ■ E-mail: elc.service@sciatl.com
Japan	Japan	<ul style="list-style-type: none"> ■ Telephone: 81-3-5908-2153 or +81-3-5908-2154 ■ Fax: 81-3-5908-2155 ■ E-mail: yuri.oguchi@sciatl.com
Korea	Korea	<ul style="list-style-type: none"> ■ Telephone: 82-2-3429-8800 ■ Fax: 82-2-3452-9748 ■ E-mail: kelly.song@sciatl.com
China (mainland)	China	<ul style="list-style-type: none"> ■ Telephone: 86-21-2401-4433 ■ Fax: 86-21-2401-4455 ■ E-mail: xiangyang.shan@sciatl.com
All other Asia-Pacific countries & Australia	Hong Kong	<ul style="list-style-type: none"> ■ Telephone: 852-2588-4746 ■ Fax: 852-2588-3139 ■ E-mail: support.apr@sciatl.com
Brazil	Brazil	<p>For <i>Technical Support</i>, call:</p> <ul style="list-style-type: none"> ■ Telephone: 55-11-3845-9154 ext 230 ■ Fax: 55-11-3845-2514 <p>For <i>Customer Service</i> or to request an RMA number, call:</p> <ul style="list-style-type: none"> ■ Telephone: 55-11-3845-9154, ext 109 ■ Fax: 55-11-3845-2514 ■ E-mail: luiz.fattinger@sciatl.com

Region	Centers	Telephone and Fax Numbers
Mexico, Central America, Caribbean	Mexico	For <i>Technical Support</i> , call: <ul style="list-style-type: none"> ■ Telephone: 52-3515152599 ■ Fax: 52-3515152599 For <i>Customer Service</i> or to request an RMA number, call: <ul style="list-style-type: none"> ■ Telephone: 52-55-50-81-8425 ■ Fax: 52-55-52-61-0893 ■ E-mail: karla.lugo@sciatl.com
All other Latin America countries	Argentina	For <i>Technical Support</i> , call: <ul style="list-style-type: none"> ■ Telephone: 54-23-20-403340 ext 109 ■ Fax: 54-23-20-403340 ext 103 For <i>Customer Service</i> or to request an RMA number, call: <ul style="list-style-type: none"> ■ Telephone: 770-236-5662 ■ Fax: 770-236-5888 ■ E-mail: veda.keillor@sciatl.com



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