

Knowledge Base Articles

Wireless Gateway Firmware Updates

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Recent Article Revision History:

 Revision/Publish
 Description of Revision

 04 Oct 2024
 Added SSU v1.2.16.0 and updated the download link for AMS Wireless Configurator v14.5

 FP2
 FP2

(See end of article for a complete revision history listing.)

Affected Products:

Product Line	Category	Device	Version
DeltaV	Network	VE4014E Wireless Gateway	4.2.9 or
			newer
Rosemount	WW-Integrated Device	1410 Emerson Wireless Gateway	4.2.9 or
Measurement	Solutions		newer
Rosemount	WW-Integrated Device	1410D Emerson Wireless Gateway and 781	4.2.9 or
Measurement	Solutions	Field Link	newer
Rosemount	WW-Integrated Device	1420 Emerson Wireless Gateway	4.2.9 or
Measurement	Solutions		newer

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1 Introduction

This Knowledge Base Article, **NK-1800-0107**, outlines the procedure to upgrade the Wireless Gateway to the latest firmware release.

2 Release Information

The latest firmware release in **4.8.7**. The firmware release includes the following update(s):

2.1 Major Changes

- Improved reliability of upgrade and restore processes.
- Updated 9530 units.

The following firmware versions are superseded by firmware 4.8.7.

Firmware version	Release Information
4.8.5	Improved stability of Gateway when sharing a network with devices that use IPv6 protocol, and improved reliability of 781 connection for 1410D Gateways.
4.8.2	Security improvements addressing Cybersecurity Notification EMR.MSOL22002-1
4.8.1	Addresses Cybersecurity Notification EMR.MSOL22001-1 and includes other security improvements.
4.7.105	This release provides general useability and compatibility improvements. This includes UDP session handling improvements. Refer to KBA <u>NK-2100-0192</u> : <i>Rosemount Smart Wireless</i> <u>Gateway 1410/1420 With Firmware 4.7.x and Newer May Have Communication Issues With</u> <u>DeltaV</u> .
4.7.100	This release addresses security vulnerabilities outlined in EMR.RMT21001-1.
4.7.94	This release addresses major fixes for redundancy pairing, 781A detection failures and new product support (Location Awareness, AMS 9530 and Pentair 3000).
4.7.90	This release addresses a general security fix with VLAN feature
4.7.84	This release adds LDAP and downstream HART support, updates security and additional small bug fixes.
4.7.75	This release adds reliability variables, updates general security and additional small bug fixes.
4.7.68	This release fixes a compatibility issue with the WirelessHART Gateway and PlantWeb Insight. If you are running version 1.5 of PlantWeb Insight, you need to have your Gateway updated to the 4.7.68 firmware.

Table 2-1: Superseded Firmware Versions

2.2 Firmware Version 4.8.7

Note: A Guardian account is required in order to download the files in this section. Please refer to **Section 9** on how to setup your Guardian account.

2.2.1 Software Terms of Use

Download the latest firmware version through the link below. For the installation procedure, refer to **Section 5 Upgrade Procedure** in this document.

https://gsuds.emerson.com/pickup/PSG/Software_Update_Terms_of_Use.pdf (Size: 16 KB)

2.2.2 Wireless Gateway Firmware 4.8.7 Release Notes

https://gsuds.emerson.com/pickup/PSG/4.8.7 RELEASE NOTES.pdf : (Size: 28 KB)

Checksum: ABBEDE06938C089CC2FC3B5C1D77394485595EF5538C944FE10D2C96CD71DC40

2.2.3 Wireless Gateway Firmware 4.8.7

https://gsuds.emerson.com/pickup/PSG/epm-1420-4.8.7-release.zip : (Size: 55713 KB)

Checksum: 23F9F9F061ED1E83887B2CE0FC5BB0A2A2130A12B7AF9FB4243E6AAC3B7918FF

Important: This upgrade will not allow you to save passwords via the web browser. Make sure to have these passwords available. Do not unzip the software before the upgrade.

2.3 General Information

2.3.1 Wireless Gateway Manual

Refer to the links below for the latest Wireless Gateway manuals.

• 1420 Manual

https://www.emerson.com/documents/automation/manual-smart-wireless-gateway-en-87246.pdf (Size: 2.36 MB)

• 1410 Manual

https://www.emerson.com/documents/automation/manual-emerson-smart-wireless-gateway-1410-en-77632.pdf Size: 2.82 MB)

2.3.2 User Interface Terminology Guide

Refer to the link below for the latest version of the User Interface Terminology Guide.

https://www.emerson.com/documents/automation/manual-supplement-emerson-smart-wireless-gateway-userinterface-terminology-guide-for-firmware-revision-4-5-en-79866.pdf (Size: 2.96 MB)

3 Warnings

- ⚠ This upgrade can only be performed on production version Gateways with firmware revision 4.2.9 or newer.
- A This upgrade cannot be applied to Gateways with a higher firmware version (i.e., cannot downgrade the firmware).
- △ During the upgrade process, the Gateway will be restarted. This will result in the temporary loss of communications to all devices on this Gateway.
- ▲ Take all necessary precautions to ensure the Gateway and PC do not lose power during the upgrade process. A loss of power may result in an unrecoverable error.
- \triangle Please close all other applications while performing a firmware upgrade.
- △ Do not close the web browser window or navigate to another web page during the upgrade process.
- A This upgrade will not allow you to save passwords via the web browser. Please be sure to have these passwords available.
- A Factory default passwords are recommended to be changed, however lost passwords cannot be recovered and require a hardware reset.
- ⚠ Gateway interface browsers are limited to 6 sessions at one time.
- A Recent versions of the following browsers are supported and recommended: Internet Explorer, Chrome browser, Mozilla Firefox, and Microsoft Edge.
- After the upgrade, you may need to clear cache or cookies if there is a difficulty logging into the browser.

4 System Backup

A system backup should be performed before any upgrades or configuration changes. Follow the procedure below to perform a system backup.

- 1. Log in to Gateway using the admin user account.
- 2. From the navigation menu, go to System Settings \rightarrow Gateway \rightarrow Backup and Restore.
- 3. Click Save Backup.
- 4. Wait for the Gateway to collect configuration parameters.
- 5. Click **Download.**
- 6. Save the file in a user selected folder.

wgdemo wgdemo accentiong	Home Devices Sy	rstem Settings	+ Network Information
System Settings >> Gateway >> Ba	up & Restore		
Gateway			
	backups in a		used for encrypting communication. Be sure to store downloaded
Features Logang Time Network		Save Backup	
NEWDIR	Restore Syste	em	
Protocols	Warning: A s	system restore will delete previously saved inform	nation and cannot be undone once completed. Be sure to back-up
	your system		
	Browse		
	Insta	Restore To Default	Restart App

Figure 1: Save System Back-up Screen

5 Upgrade Procedure

5.1 Start Firmware Upgrade

Everything needed to upgrade the Gateway firmware is contained in a zip file provided by Emerson. This file is digitally signed to prevent tampering. The zip file should not be unzipped.

Follow the steps below to start the firmware upgrade.

- 1. Log into the Gateway using the admin user account.
- 2. From the navigation menu, go to **System Settings** \rightarrow **Gateway** \rightarrow **Firmware** as shown in Figure 2.

System Settings >> Gateway >> Firmware	
Gateway	
Access List	Firmware Upgrade
Backup And Restore	
Certificate Management	
Ethernet Communication	This is a procedure for installing a firmware upgrade in the Gateway. This should be done by recommendation of your Factory Representative.
Firmware	
Features	Warning: A firmware upgrade will require a restart of your wireless system. During the upgrade the wireless network will rebuild
Logging	To upgrade your firmware, select release zip file to upload
Time	Choose files
Network	
Protocols	Upgrade
Users	opyrate

Figure 2: Firmware Upgrade Screen

3. Click **Choose files**.

- Read the terms of use for the upgrade file. <u>https://gsuds.emerson.com/pickup/PSG/Software_Update_Terms_of_Use.pdf (Size: 16 KB)</u>
- 5. Using the browse window, select the zip file for the new firmware.

Note: In this upgrade, the security setup utility will also need to be updated. Refer to **Section 7**: Upgrade to the Latest Secure Setup Utility.

6. Click Upgrade.

7. Click **OK** when the warning message in Figure 3 appears.

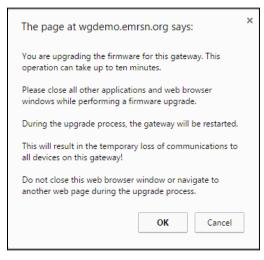


Figure 3: Upgrade Warning Message

At this point, the Gateway will upload the new firmware file. There will be no feedback from the web browser for 1-2 minutes while the file is being uploaded.

Once the file has been uploaded, the Gateway will validate the file. A progress window will appear as shown in Figure 4. It will take approximately 10 minutes to complete this part of the upgrade process.

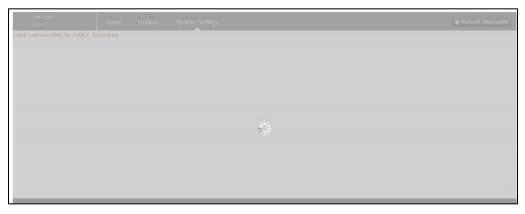


Figure 4: Installation screen

When the installation is finished, the Gateway will automatically restart. Once the restart is complete, a message from webpage will appear (See Figure 5). Follow the instruction in the dialog box to open the Login Screen (See Figure 6).

Close all browser windows before logging in again. If this is your only active Gateway session, click the login link to log in again. Click **here** to retry login.

Figure 5: Retry login message

Unlock?	
Please enter your	password to unlock this section.
Username	
Password	
	log on unless you are an authorized user. Unauthorized access
Login	

Figure 6: Login screen

6 Verify New Firmware

Once the upgrade process is complete, verify the new firmware by logging in to the Gateway and checking the version number. The firmware revision in the upper left corner should show the latest firmware release. Refer to **Section 2** for the latest firmware version.

EMERSON. Wire	eless Ga r 4.8.7	iteway			admin (adm	in) About Help Logout
wgderno4 wgderno4	Hon	ne Devices Sy	stem Settings			
		Notifications				
All Devices		Tasks				
		No Pending Tasks				
Live		Unreachable				
0		No results found.				
Unreachable		New				
*		Recently Added(last 5	devices)	Date Added	Current PV	
		No New Devices.				
Power Module L	.ow	Changes				
0		Description	From	То	Requested	Status
Gateway Load		Performing a system			12/05/23 13:14:12	
0%		backup.				
Network Best Practices		Performing a system backup.			12/05/23 12:28:30	
5 devices within range of gateway	0%	Performing a system backup.			12/05/23 07:52:50	
Go to Devices 25% devices within the sing hop of gateway	ile b%	Performing a system backup.			12/05/23 07:06:00	
Go to Devices	. F. W	Performing a system backup.			12/05/23 02:24:53	

Figure 7: Revision number

7 Upgrade to the latest Secure Setup Utility

Follow the steps below to upgrade the **Secure Setup Utility (SSU)** to the latest version (version 1.2.15.1).

WARNING: Gateway firmware must be upgraded to Version 4.8.1 or later **<u>before</u>** SSU can be upgraded to Version 1.2.15.1. Failure to upgrade Gateway prior to SSU upgrade will cause incompatibility between Gateway and SSU.

- 1. Uninstall the current version. The software will be uninstalled but the configuration files will remain.
- 2. Navigate to Control Panel \rightarrow Programs \rightarrow Uninstall a program.

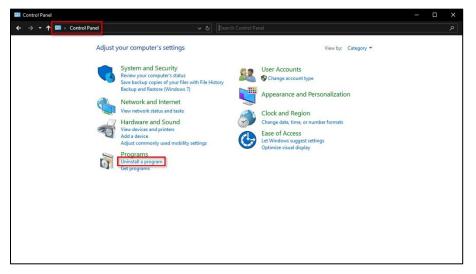


Figure 8: Control Panel - Uninstall a program

• In the table of installed programs, select Gateway.

0	Programs and Features							<u> </u>	×
÷	> 🔸 🕇 🗟 « All Contr	ol Panel Items → Program	ms and Features 🛛 🗸 진						م
•	Control Panel Home View installed updates Turn Windows features on or		nange a program gram, select it from the list and the	n click Uninstall, Change, or Repair.					
	off Install a program from the	Organize 🔻							 •
	network	Name	^	Publisher	Installed On	Size	Version		^
		Gateway		Emerson Process Management	t,	Citiz C			*

Figure 9: Control Panel - Uninstall Secure Setup Utility

• In the pop-up window select Remove.

Security Setup l	Utility - InstallShield Wizard	×
Welcome		V
Modify, repa	air, or remove the program.	
	the Security Setup Utility Setup Maintenance program. This program lets you current installation. Click one of the options below.	1
○ Modify		
	Select new program features to add or select currently installed features t remove.	0
O Repair	Reinstall all program features installed by the previous setup.	
ঁতা		
Remove	Remove all installed features.	
InstallShield —	· · · · · · · · · · · · · · · · · · ·	
	<back next=""> Can</back>	cel

Figure 10: Gateway - InstallShield Wizard

3. After the wizard removed the program, download the latest version of Secure Setup Utility from this link:

WARNING: Confirm Gateway Firmware is Version 4.8.1 or later **<u>before</u>** installing Version 1.2.16.0 of SSU. Failure to have Gateway Firmware Version 4.8.1 or later will cause incompatibility between Gateway and SSU.

• Release notes

https://gsuds.emerson.com/pickup/PSG/SSU 1.2.16.0 RELEASE NOTES.pdf : (Size: 71 KB)

Checksum: 0C92E162C1F361A91F7B5583A68A803C210155EF9539153C53E5F6D79AE18063

• Installer file

https://gsuds.emerson.com/pickup/PSG/X420_SETUP_1.2.16.0.zip : (Size: 249079 KB)

Checksum: 329A429E408EFF312A40F56C49EEFB0346DD2B8944EDA47DDA082BDB193509CE

- 4. Navigate to setup.exe in the Secure Setup Utility download.
- 5. Follow the steps to reinstall the secure setup utility. Once the setup is complete, verify that all previous connections are established.

8 Download the latest AMS Wireless Configurator

The following download link will provide AMS Wireless Configurator Version 14.5 FP3. A Guardian account is needed to download. If you do not have a Guardian account, an account request can be made by following the procedure outlined in **Section 9**.

https://gsuds.emerson.com/pickup/PSG/AMSWiCfg14_5b.iso : (Size: 3215878 KB)

Checksum: A4915D42FE27ABCC49B7247934DE7BF5E961E051B6F212A2F8F2FA557837E644

Once downloaded, extract the .iso file to your computer and run the AMSWirelessConfigurator_Setup.exe wizard to complete the installation.

9 Setting up your Guardian Account

In order to download files in **Section 2.2**, user needs to have a Guardian Account. Follow the instructions below on how to request this account.

- 1. Email Guardian.Info (<u>Guardian.Info@Emerson.com</u>) with the following info (subject: Guardian Account for WirelessHART Gateway Firmware Download)
 - o Enterprise Name:
 - Company Name:
 - Email Address:
 - First Name:
 - o Last Name:
 - Primary Phone Number:
 - Company Address:
 - WirelessHART Gateway Serial Number:
- 2. Once confirmed, an email will be sent containing your username and initial password.
- 3. Log in to the Guardian website (https://guardian.emerson.com) to change your initial password.
- 4. You can now use your Guardian Login Credentials in downloading your WirelessHART Gateway Firmware.

10 Technical Support

For technical assistance, contacts are listed below:

10.1 Global Service Center

Services are delivered through our global services network. To contact your Emerson local service provider, click <u>Contact</u> <u>Us</u>. To contact the Global Service Center, click <u>Technical Support</u>.

10.2 Customer Central

Technical support, quoting, and order-related questions.

- United States 1 800 999 9307 (7:00 am to 7:00 pm CST)
- Asia Pacific 65 6777 8211
- Europe / Middle East / Africa 49 (8153) 9390

10.3 National Response Center

Equipment service needs.

• 1 800 654 7768 (24 hours - USA and Canada)

Outside of these areas, contact your local Emerson representative.

Important: These commodities, technology or software were exported from the United States in accordance with the export administration regulations diversion contrary to U.S. law prohibited.

Download the Sigcheck tool: Click This Link

To get information on how to use the Sigcheck tool: Click This Link

Related products and services: <u>DeltaV DCS</u> | <u>Lifecycle Services</u>

Complete	Article	Revision	History:
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04 Oct 2024 Added SSU v1.2.16.0 and updated the download link for AMS Wireles	s Configurator v14.5
FP2	
10 Sep 2024Updated the download file for SSU 1.2.15.1.	
14 May 2024 Added SSU v1.2.15.1.	
19 Dec 2023Added new firmware v4.8.7, SSU v1.2.15.0, and AMSWiCfg14.5 FP2 is	
18 Jul 2023 Corrected Security Setup Utility installer in Section 7. Added Section	8 about information
and download link on the latest AMS wireless configurator.	
20 Feb 2023 Updated information in Section 2 and the firmware 4.8.5 Release Note	es.
02 Feb 2023 Added new firmware v4.8.5.	
06 Jul 2022 Added new firmware v4.8.2.	
28 Jan 2022 Added new firmware 4.8.1 and SSU version 1.6.9. Minor updates in do	
15 Dec 2021 Added Section 8 on how to setup a Guardian account. Added reference	ce KBA NK-2100-0192
in Section 2.	6.6. Undeted Section 7
14 Oct 2021 Added note in Section 2 about ICSA-21-278-02. Added SSU version 1. about SSU version 1.6.6 update.	.6.6. Opdated Section 7
29 Sep 2021 Added new firmware v4.7.105	
16 Sep 2021Removed download link for Wireless Gateway Firmware 4.7.100. Add	ed a note in Section
2.1.3.	
28 Jun 2021 Added new firmware v4.7.100	
09 Dec 2020 Added new firmware v4.7.94	
08 May 2020 Added new firmware v4.7.90	
13 Jan 2020 Updated link for Secure Setup Utility v1.6.0 in section 7 step 3.	
02 Oct 2019 Added new firmware v4.7.84	
13 Jun 2019 Added new firmware v4.7.75	
06 Feb 2019 Reflected the latest approved firmware version (4.7.68), removed "Sm	nart" from the KBA title
as the device is now called "Wireless Gateway", and added the table	in section 2.
11 Sep 2018 Formatting changes	
23 Aug 2018Added new firmware v4.7.61	
15 Mar 2018 Original Release of Article	

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