

Grandstream Networks, Inc.

GWN7610 WiFi Access Point

Firmware Upgrade Guide



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INTRODUCTION

All Grandstream products' firmware are improved and updated on a regular basis. Latest firmware versions are available in <http://www.grandstream.com/support/firmware> under "WiFi Access Points" section.

Published firmware versions in Grandstream official website have passed QA tests and included new enhancements implemented, reported issues fixes for better user experience; all changes are logged in Release Notes documents.

Grandstream recommends to read Release Notes document which may include special firmware upgrade notices and always keep your devices up-to-date by upgrading their firmware versions regularly.

GWN7610 can be deployed and used either in Standalone/Master mode or in Slave mode.

This document describes steps needed to upgrade GWN7610 firmware version and covers following scenarios:

- **Upgrade when GWN7610 is used in Standalone/Master Mode**
- **Upgrade when GWN7610 is used in Slave Mode**



GWN7610 IN STANDALONE/MASTER MODE

The GWN7610 can be upgraded via TFTP/HTTP/HTTPS by configuring the URL/IP Address for the TFTP/HTTP/HTTPS server and selecting a download method. Configure a valid URL for TFTP, HTTP or HTTPS; the server name can be FQDN or IP address.

Follow below steps to successfully upgrade your device:

1. Access GWN7610 web interface and navigate to **System Settings->Maintenance**.
2. In **Upgrade Via** dropdown list, select appropriate protocol (**HTTP, HTTPs** or **TFTP**).
If using Grandstream server, select *HTTP*.
3. In **Firmware Server** field, enter the URL of the server where the firmware file is located.
If using Grandstream server, enter "*firmware.grandstream.com*". To upgrade to beta firmware (if available) enter "*firmware.grandstream.com/BETA*".
4. Press **Save** button.
5. To start the upgrade, there are two options:
 - a. Press **Upgrade Now** button to start upgrade immediately.
 - b. Press **Reboot** button to restart the unit. GWN7610 will contact firmware server to start upgrade if option "*Check/Download New Firmware at Boot*" is enabled.
6. If a new firmware is available, GWN7610 will download the firmware file and start upgrade process.

Please refer to Firmware Upgrade Settings for advanced options.

Important: During upgrade process GWN7610 LEDs will be blinking in green, and turn to solid green indicating successful firmware update. If firmware update fails, GWN7610 LEDs will be solid red.

Notes:

- Service providers should maintain their own firmware upgrade servers. For users who do not have TFTP/HTTP/HTTPS server, some free windows version TFTP servers are available for download from:
http://www.solarwinds.com/products/freetools/free_tftp_server.aspx
<http://ftpd32.jounin.net>
End users can also choose to download a free HTTP server from <http://httpd.apache.org/> or use Microsoft IIS web server.
- The latest firmware is available at <http://www.grandstream.com/support/firmware>. Unzip downloaded file and make the firmware file (*.bin) available in your firmware server.



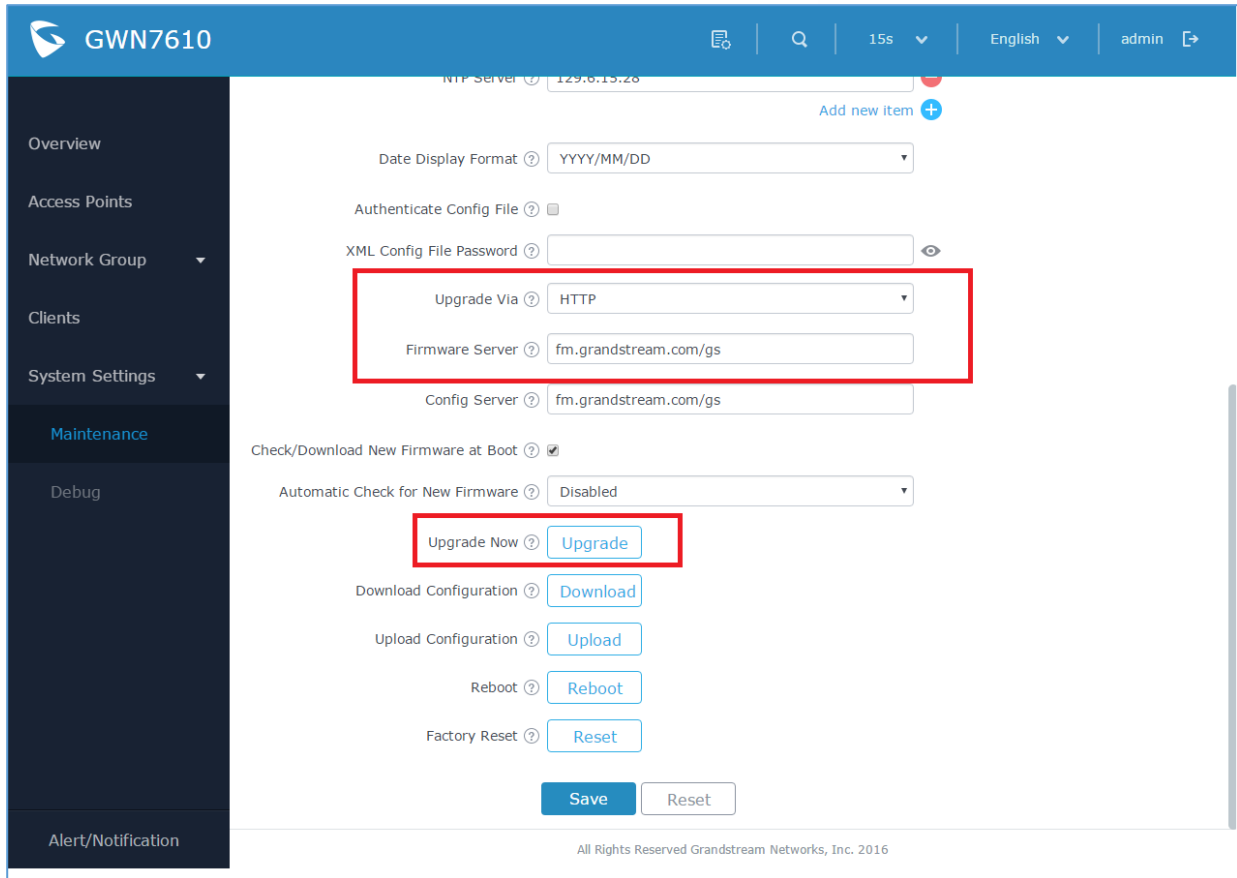



Figure 1: Maintenance Page

Upgrade Settings

Upgrade settings are available at GWN7610 web interface > **System Settings** > **Maintenance** and include following parameters:

Table 1: Network Upgrade Configuration

Upgrade Via	Allows users to choose the firmware upgrade method: TFTP, HTTP or HTTPS.
Firmware Server	Defines the server path for the firmware server.
Check Update on Boot	Allows the device to check if there is a firmware from the configured firmware server at boot.
Automatic Upgrade check interval(m)	Sets the value for automatic upgrade check in minutes.
Upgrade Now	Click on  button to begin the upgrade. Note: The device will reboot after downloading the firmware.



GWN7610 IN SLAVE MODE

When the GWN7610 is being paired as slave using another GWN7610 access point acting as controller, users can upgrade their paired access points from the controller GWN7610.

To upgrade a slave access point, log in to the GWN7610 acting as Master Controller and go to **Access Points**. User can then upgrade slave GWN7610 access points in batch mode or upgrade a single slave access point.

Batch Upgrade

When having multiple Paired Access Points, users have the ability to upgrade all of them to the same firmware, this can be helpful in medium and large deployment where having Master/Slave Architecture.








Paired Devices						Upgrade All
Device Type	Name/MAC	IP Address	Status	Uptime	Firmware	Actions
GWN7610	00:0B:82:8B:4D:D4	192.168.6.20	Online	1d 16h 51m 53s	1.0.1.15	 
GWN7610	00:0B:82:8B:4E:24	192.168.6.29	Online	28m 1s	1.0.1.15	 

Figure 2: Access Points

Make sure that firmware server path is set correctly under **System Settings > Maintenance**, and click on  to upgrade all paired access points. The units will download automatically the firmware from the configured server path, and reboot afterwards.

Single Upgrade

Instead of using **Upgrade All** options, users can perform an upgrade to a single paired access points if needed by clicking on  next to the paired device to access its configuration page, and click on  to upgrade the device.

Make sure that firmware server path is set correctly under **System Settings > Maintenance** before starting upgrade process.



Device Configuration ✕

<div style="border: 1px solid #ccc; padding: 2px; margin-bottom: 5px;">Status</div> <div style="border: 1px solid #ccc; padding: 2px; margin-bottom: 5px;">Users</div> <div style="border: 1px solid #ccc; padding: 2px; background-color: #e0e0e0; margin-bottom: 5px;">Configuration</div>	<div style="margin-bottom: 10px;">Device Name ? <input style="width: 100%;" type="text"/></div> <div style="margin-bottom: 10px;">Fixed IP ? <input type="checkbox"/></div> <div style="margin-bottom: 10px;">Frequency <input style="width: 100%;" type="text" value="Dual-Band"/></div> <div style="margin-bottom: 10px;">Enable Band Steering <input type="checkbox"/></div> <div style="display: flex; justify-content: space-between; margin-bottom: 5px;"> 2.4GHz 5GHz </div> <div style="display: flex; justify-content: space-between; margin-bottom: 10px;"> <div style="width: 48%;"> Mode ? <input style="width: 100%;" type="text" value="802.11n"/> </div> <div style="width: 48%;"> <input style="width: 100%;" type="text" value="802.11ac"/> </div> </div> <div style="display: flex; justify-content: space-between; margin-bottom: 10px;"> <div style="width: 48%;"> Channel Width ? <input style="width: 100%;" type="text" value="20MHz"/> </div> <div style="width: 48%;"> <input style="width: 100%;" type="text" value="80MHz"/> </div> </div> <div style="margin-bottom: 10px;"> 40MHz Channel Location ? <input style="width: 100%;" type="text" value="Auto"/> </div> <div style="display: flex; justify-content: space-between; margin-bottom: 10px;"> <div style="width: 48%;"> Channel <input style="width: 100%;" type="text" value="Auto"/> </div> <div style="width: 48%;"> <input style="width: 100%;" type="text" value="Auto"/> </div> </div> <div style="display: flex; justify-content: space-between; margin-bottom: 10px;"> <div style="width: 48%;"> Enable Short Guard Int... <input checked="" type="checkbox"/> </div> <div style="width: 48%;"> <input checked="" type="checkbox"/> </div> </div> <div style="display: flex; justify-content: space-between; margin-bottom: 10px;"> <div style="width: 48%;"> Active Spatial Streams ? <input style="width: 100%;" type="text" value="Auto"/> </div> <div style="width: 48%;"> <input style="width: 100%;" type="text" value="Auto"/> </div> </div> <div style="display: flex; justify-content: space-between; margin-bottom: 10px;"> <div style="width: 48%;"> Radio Power ? <input style="width: 100%;" type="text" value="High"/> </div> <div style="width: 48%;"> <input style="width: 100%;" type="text" value="High"/> </div> </div> <div style="margin-bottom: 10px;"> Reboot Device <input style="width: 100%;" type="button" value="Reboot"/> </div> <div style="margin-bottom: 10px;"> Upgrade Device Firmware ? <input style="width: 100%;" type="button" value="Upgrade"/> </div>
<input style="width: 40%; margin-right: 10px;" type="button" value="Save"/> <input style="width: 40%; margin-right: 10px;" type="button" value="Cancel"/>	

Figure 3: Device Configuration

The status of the device will show “Upgrading”, wait until it finishes and reboots, then it will appear online again.

GWN7610	00:0B:82:8B:4D:D4	192.168.6.20	Upgrading	1d 22h 48m 29s	1.0.1.15	
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Figure 4: GWN7610 Upgrading

Important:

Please do not interrupt or power cycle the GWN7610 during upgrading process.

During upgrade process GWN7610 LEDs will be blinking in green, and turn to solid green indicating successful firmware update. If firmware update fails, GWN7610 LEDs will be solid red.

