Title

Maintenance menu

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The "Maintenance" menu allows you to perform service tasks for the device maintenance and to check the hardware and software version, reason for the last reboot, system uptime, current configuration, license, diagnostic card, etc.

"Maintenance" page has the following sections:

- Firmware
  - SSL certificate installation
  - Firmware update
  - Mass firmware upgrade
- Upload
- Download
- Bottom section of the page

Firmware



Figure - Firmware

Parameter	Description
Firmware Version	• Displays the current firmware version • The firmware string contains also the hardware platform type
Build Date	• Displays the firmware build date
Serial Number	• Displays the serial number of the unit
Part Number	• Displays the part number of the unit • It contains information about the unit type
Platform	• Displays the processor model

Uptime	• Displays the system up time since the last reboot

Last Reboot Reason	• Displays the reason for the last reboot of the unit
	• The options are:
	  ◦ Software fault
	  ◦ Unexpected restart
	  ◦ Manual restart
	  ◦ Manual delayed restart
	  ◦ Firmware upgrade
	  ◦ SNMP managed restart
	  ◦ Test firmware loaded

Table - Firmware parameters

SSL certificate installation

> **NOTE**
>
> To configure a wireless device via Web GUI using secure protocol HTTPS, a SSL certificate must be installed as trusted into your web browser. Otherwise, the automatic update function will not be available.

The following description shows an installation process for Google Chrome web browser. Configuration of other web browsers is described in the relevant product user guide and is similar to following.

1. Download SSL certificate by clicking the "Install Certificate for upgrade firmware via SSL" link. Please note, this link is available if you connect to the Web GUI via HTTPS only.
2. Open the "Chrome Settings" section and click on the "Manage certificates" button.

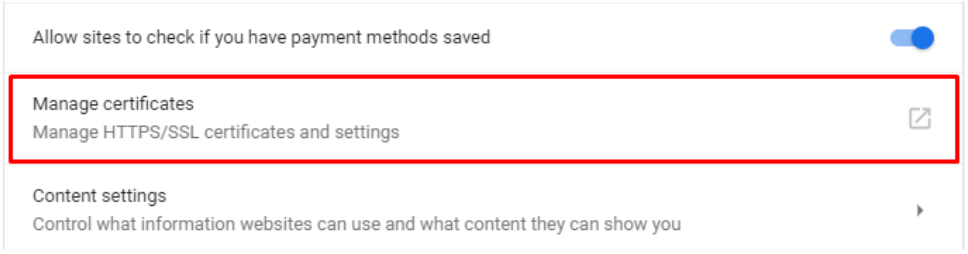


Figure – Google Chrome Settings

3. Click the "Import..." button to launch Certificate Import Wizard.
4. Follow the wizard's instructions and choose the file to be imported. Click the "Browse..." button and choose the SSL certificate that you have downloaded before. Click the "Next" button to proceed.

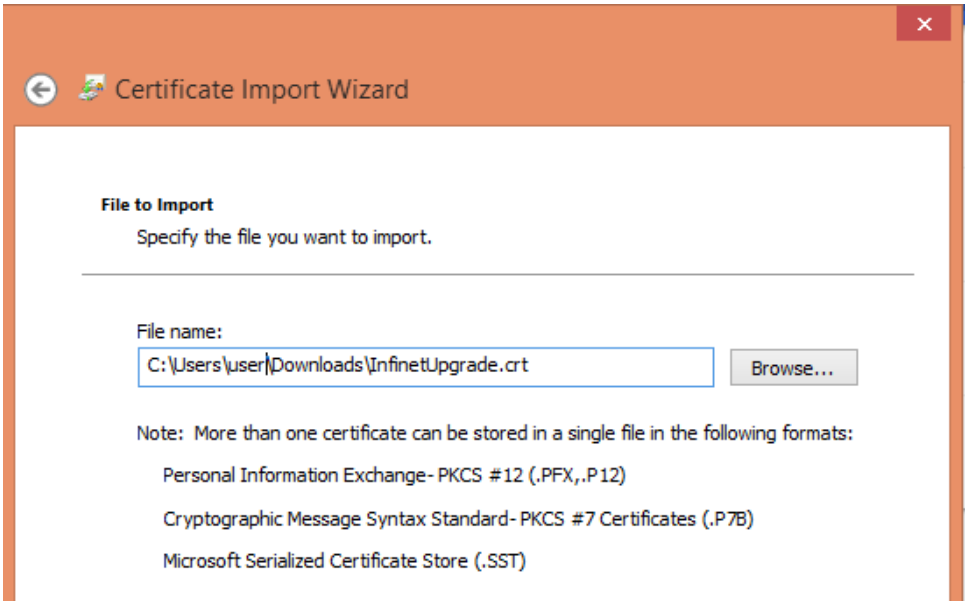


Figure – Certificate Import Wizard

5. In the next step it is necessary to select the repository where certificate will be placed. All new certificates are installed into the personal repository by default, click on the "Browse..." button and select "Trusted Root Certification Authorities". Click the "Next" button to proceed.

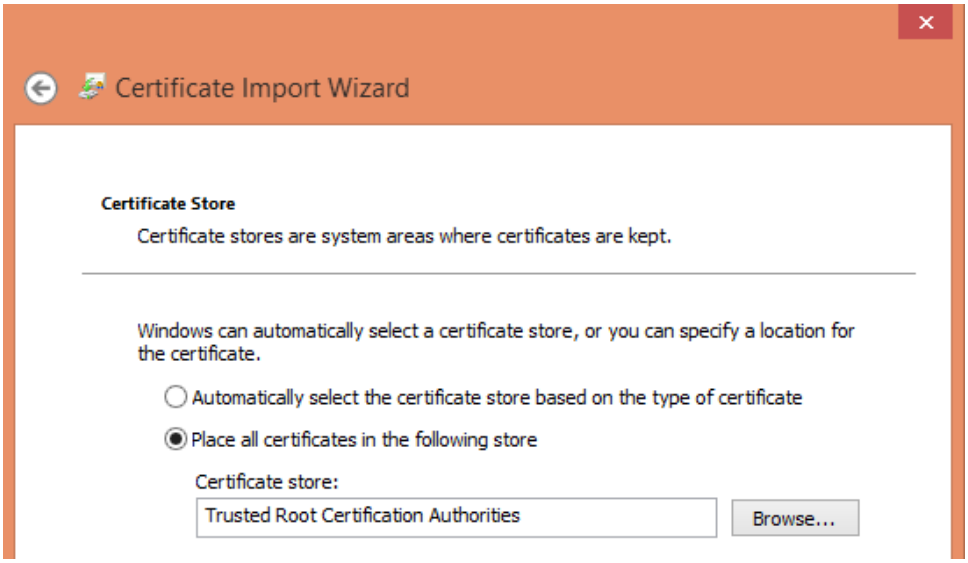


Figure – Certificates store selection

6. Final step is to check all the provided information. Click the "Finish" button if it's correct. The security warning will appear, click the "Yes" button to confirm you really want to install the certificate.

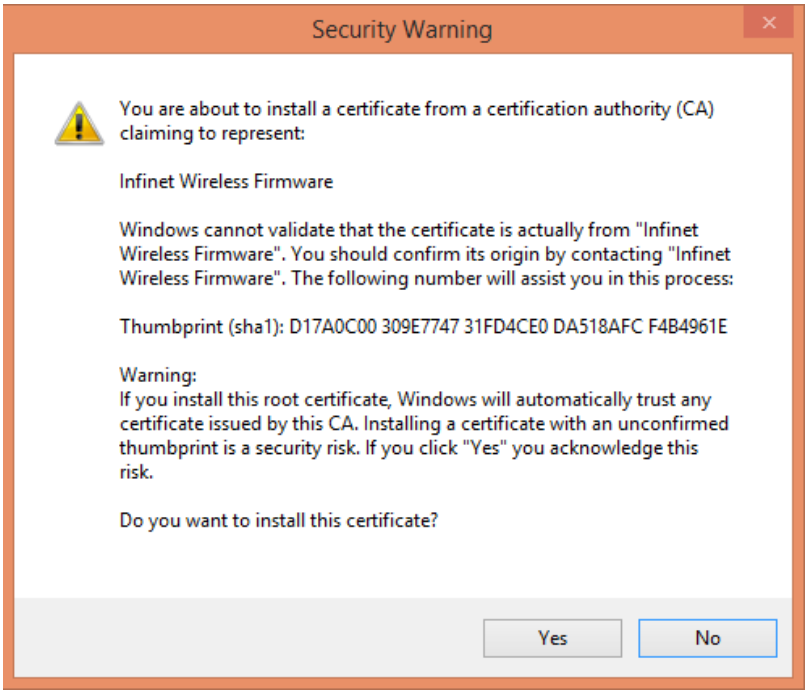


Figure – Installation confirmation

Firmware update

The firmware can be updated in two ways: automatically and manually.

Automatic update

The system checks automatically for the firmware updates on the InfiNet Wireless repository and displays a warning message for 10s at each login to the Web interface if a new software version is available:

> **NOTE**
>
> It is not mandatory for the unit to have access to the Internet for this feature to work. However, the PC that is used to initialize the upgrade procedure must have access to Infinet Wireless website (both http and ftp).

In case of new software version availability, after clicking the «Check Latest Release» button, the system provides the following options:

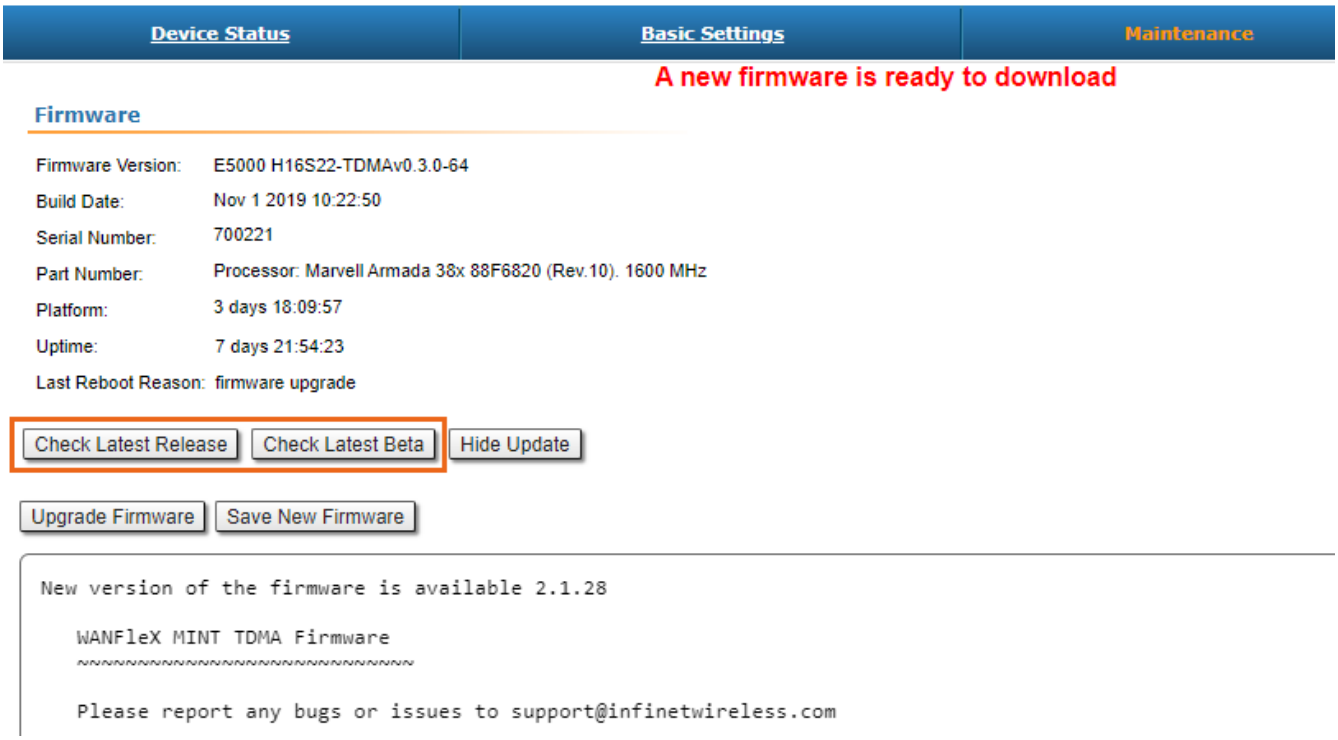


Figure - New firmware availability

By clicking the «Upgrade Firmware» button, the system starts the firmware upgrade process automatically:



Figure - Firmware upgrade

After the firmware upgrade process ends, you have to reboot the unit before using the new software version:

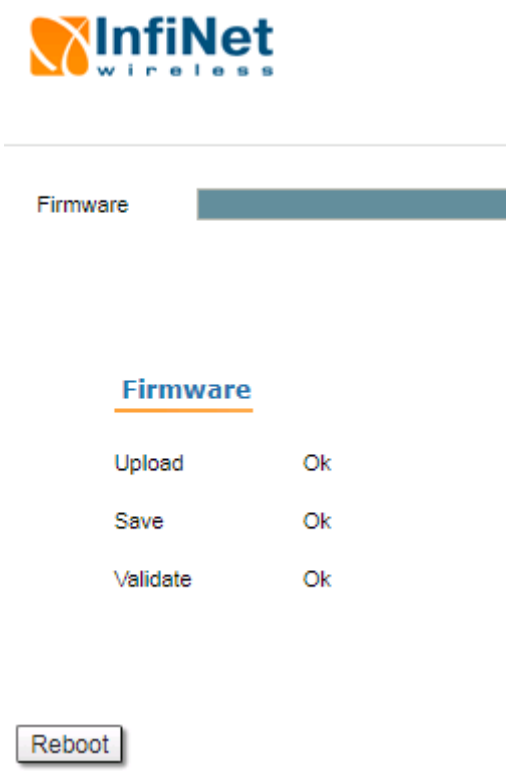


Figure - Firmware upgraded succesfully

By clicking the «Save New Firmware» button, you download the new firmware file locally on your PC.

If no new firmware version is available, the system provides a full change log for the latest firmware release after clicking the «Check Latest Release» button:

```
You are using the latest version of firmware 2.1.28

   WANFleX MINT TDMA Firmware
   ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

   Please report any bugs or issues to support@infinetwireless.com

19.01.21   V2.1.28
~~~~~~~~~~~~~~~~~~~~~~
  RADIO
  1. More accurate transmit power control on short links.
  2. More accurate noise and interferente control during DFS and Instant DFS operations.
  3. Improved noise immunity.
  4. New QOS aware downstream scheduler implemented.
  5. Added support for new radios.

  LAG/LACP
  1. Added EoMPLS support to load balancing hash function.
  2. Added per-packet load balancing option (for tests and study).

  SYSTEM
  1. Advanced Traffic Monitor (L2 support added)
  2. Improved failover option.
  3. Packet forwarding rate increased.
  4. Fixed some security issues.
  5. System optimization, bug fixes.
```

Figure - Latest firmware change log

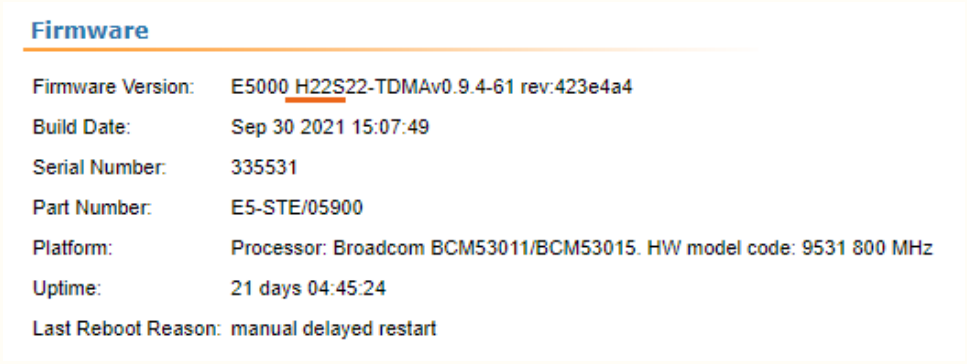
The process above is the same in case of Beta firmware version. Click the «Check Latest Beta» button for it.

Manual update

In case the PC does not have an access to the Internet, the device must be updated manually. To do this, proceed to the following steps:

1. Download the required firmware version in advance from the official FTP server (https://ftp.infinet.ru).

   Pay attention to the hardware platform of the device being updated, indicated in the Firmware section.

   - Firmware for devices H16 platform based can be downloaded via the link: https://ftp.infinet.ru/pub/Firmware/Evolution/h16/
   - Firmware for devices H22 platform based can be downloaded via the link: https://ftp.infinet.ru/pub/Firmware/Evolution/h2257/

2. Choose the downloaded firmware file in the "Upload" section.
3. Click the "Upload" button. The upgrade process will be started.

Mass firmware upgrade

Each device has the ability to mass firmware upgrade using OTA (Over the Air) function. The firmware can be distributed to:

- All devices within a single MINT domain. The firmware will be applied even to the not directly connected devices.
- Neighbor devices, directly connected to the current.

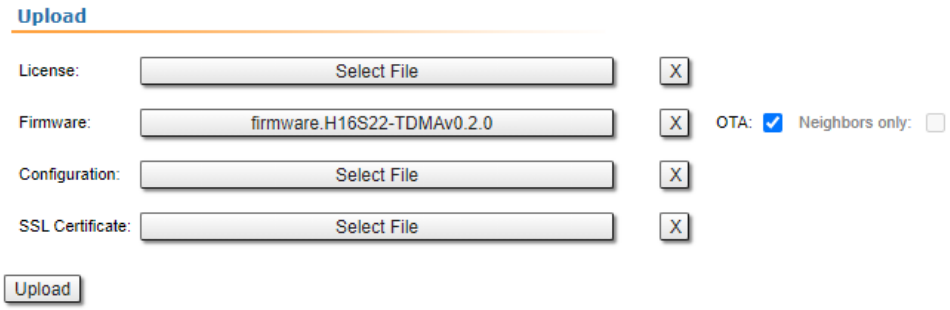
NOTE

Only one firmware version can be applied during one mass upgrade cycle. The uploaded firmware version will be applied only to those devices that are built on the same platform. Thus if the upgraded network includes devices on different platforms, the mass upgrade cycle should be performed for each platform.

In case the OTA function is enabled the uploaded firmware will not be applied to the device from which the upgrade is performed. It will be uploaded only to the other network devices.

Mass upgrade cycle includes the following steps:

1. Download the required firmware version from the official FTP server (ftp://ftp.infinetwireless.com).
2. Choose the downloaded firmware file in the "Upload" section. Enable OTA function. Enable "Neighbors only" in case you want to upgrade only the neighbor devices.

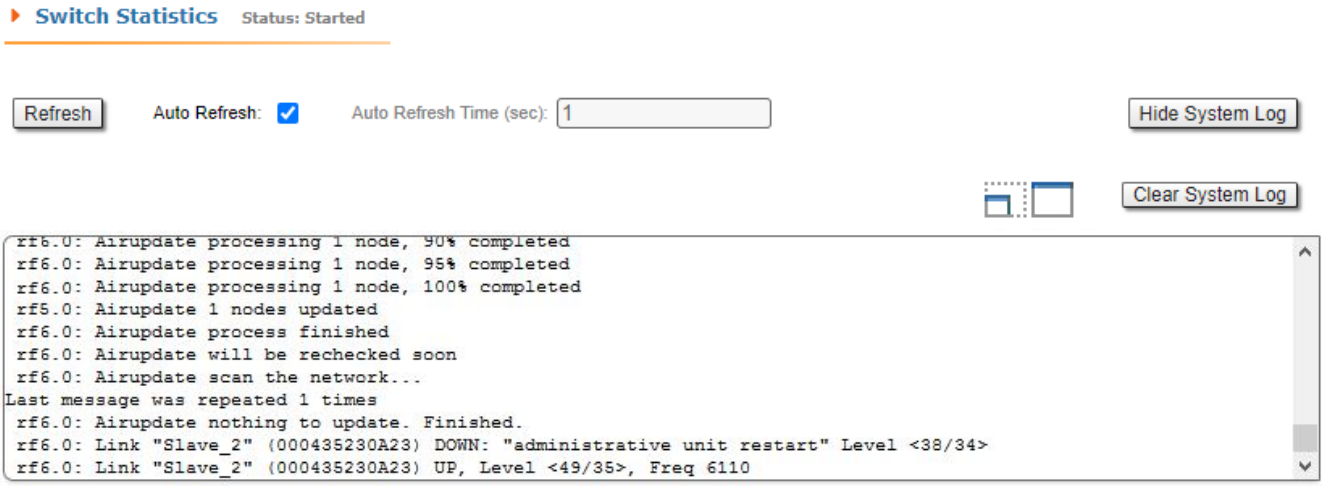


3. Click the "Upload" button. The mass upgrade process will be started.

Mass upgrade monitoring

The mass upgrade progress can be seen in the System Log (Device Status section): the number of upgraded devices and progress.

The remote devices will be rebooted after upgrade completion. The connection failure duration is approximately 35-40 seconds per device.



Upload

The "Upload" section allows you to upload other license, firmware and configuration files to the unit.

For each of the three options, click the «Choose File» button, followed by the «Upload» button after the file has been picked up.

After clicking the «Upload» button, the system performs three operations: uploading, saving and validating the new file uploaded and indicates if each of the operation succeeded or failed. In case that the process succeeded, you have to reboot the unit in order to apply the new changes.

Download

The "Download" section allows you to download locally, to the management PC, the current license, firmware and configuration files, by clicking the corresponding buttons: «Download License», «Download Firmware» and «Download Configuration».

Bottom section of the page

The following buttons are available:

- «Reboot» - reboots the device. A warning message pops up asking for the permission before the operation to start. During the restart process, you are redirected to the login page and the timeout period of 35 seconds counts down before the new login:



Figure - Unit reboot

- «Restore Factory Settings» - restores the factory default configuration. A warning message pops up, asking for the permission before the operation to start. During the reset to factory process, you are redirected to the login page and the timeout period of 30 seconds counts down before the new login:
- «View Current License» - shows the current device license parameters in a new window
- «View Current Configuration» - shows the current device configuration in text format in a new window
- «Create Diagnostic Card» - Tech Support Reports Generator. By clicking this button, the system downloads to the local PC a text file that contains the complete information (for the technical support specialists) set from the device such as: full device configuration listing, system log output, license information, "*mint map detail*" command output, interfaces statistics, etc.