

Horizon Series Software Update – January 2018

(swupdate-horizon-201801100856)

Security Update

In October 2017 a potential vulnerability to WiFi security was identified as the Key Reinstallation Attack (KRACK). No known attacks have occurred to an ESTeem wireless network but in response to the threat a security update has been implemented in the latest software update for the Horizon series radios.

New Features

In this software update, the following new features were implemented:

Radio Packet Monitor – This feature allows the Horizon radio to output all received radio packets to Wireshark packet analyzer software for more detailed wireless analysis.

EtherStation Mode Access – This software update sets the secondary Ethernet interface to a monitoring and programming port when the radio is configured in EtherStation client mode.

NTP Master Mode – One of the Horizon radios in a wireless network can be configured for a local Network Time Protocol (NTP) server without having access to the Internet.

DHCP Static IP Reserves – This software update will provide reserved IP addresses when configured as a DHCP server.

Update Procedure

The software update will be completed in two phases. The first phase will update the radio's "boot loader" software to the latest version and the second phase will be the radios operating software to integrate the security update and new features. To complete the software update you will need the two following update files either sent by ESTeem support or available for download from our FTP server at <ftp://ftp.esteem.com/Horizon/>

swupdate-s1s2-horizon-201801100856.img (Boot Loader Software)

swupdate-horizon-201801100856.img (Operating Software)

Phase 1 – Boot Loader Update

1. To update the boot loader software, open the Horizon radio's web interface with any web browser and select Software Update (Figure 1). Select "Software update image file" and press the *Next* button.

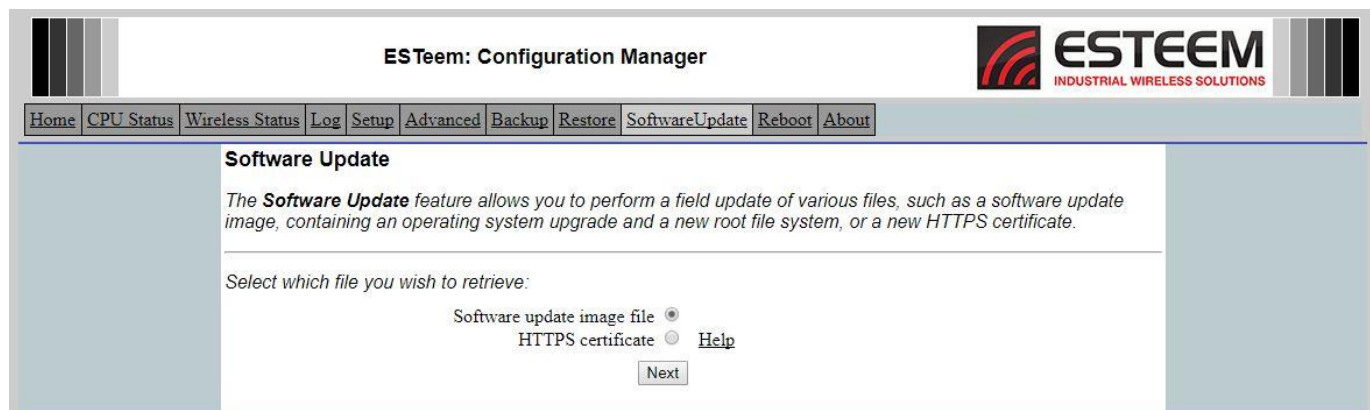


Figure 1: Software Update

2. Select “Upload via web browser” and press the *Next* button.
3. Press the *Choose File* button and select the **swupdate-s1s2-horizon-201801100856.img** file from the location it was saved on the computer. The file name will be displayed in the “software image path”. Press the *Upload File* button and Figure 2 will be displayed.

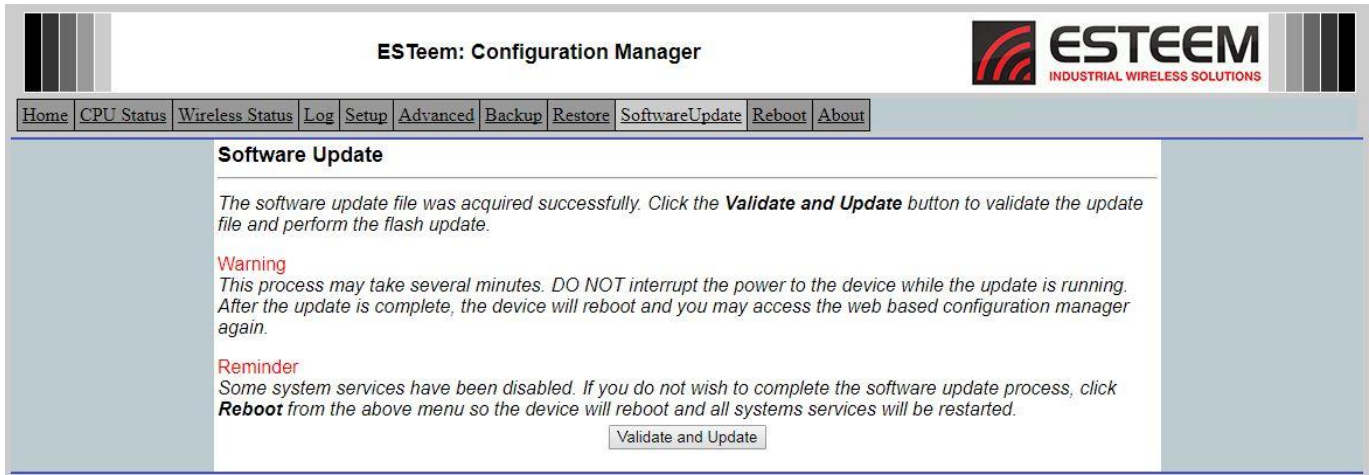


Figure 2: Validate and Update

4. Press the *Validate and Update* button to verify the integrity of the update file and complete the software update. The software update will take approximately 2 minutes to complete the update.

Phase 2 –Operating System Update

Updating the operating software is identical to updating the Boot Loader software but using the **swupdate-horizon-201801100856.img** image file.

1. To update the operating system software, open the Horizon radio’s web interface with any web browser and select Software Update (Figure 1). Select “Software update image file” and press the *Next* button.
2. Select “Upload via web browser” and press the *Next* button.
3. Press the *Choose File* button and select the **swupdate-horizon-201801100856.img** file from the location it was saved on the computer. The file name will be displayed in the “software image path”. Press the *Upload File* button and Figure 2 will be displayed.
4. Press the *Validate and Update* button to verify the integrity of the update file and complete the software update.

Boot Loader Update Warning

If the operating system software is updated without updating the boot loader, the software will still function but the complete security update will not be valid. A warning message (Figure 3) will be displayed on a banner at the top of the web interface in the Horizon.

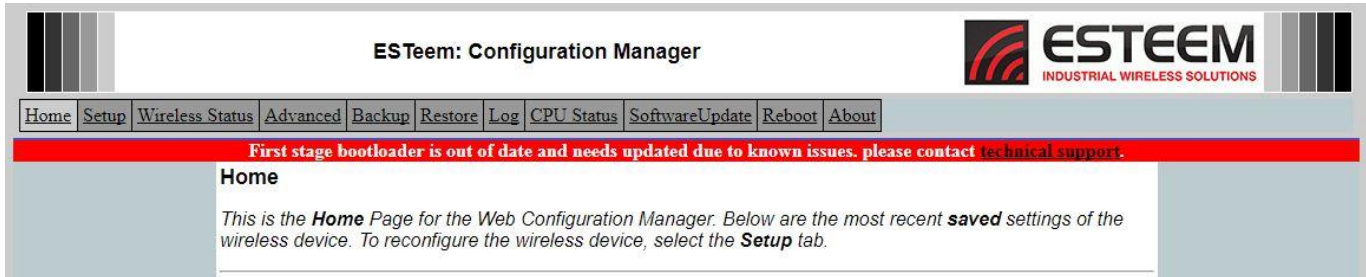


Figure 3: Boot Loader Out of Date Warning

To clear boot loader warning message simply update the boot loader software as shown in Phase 1 above the Horizon web interface will be as shown in Figure 4.

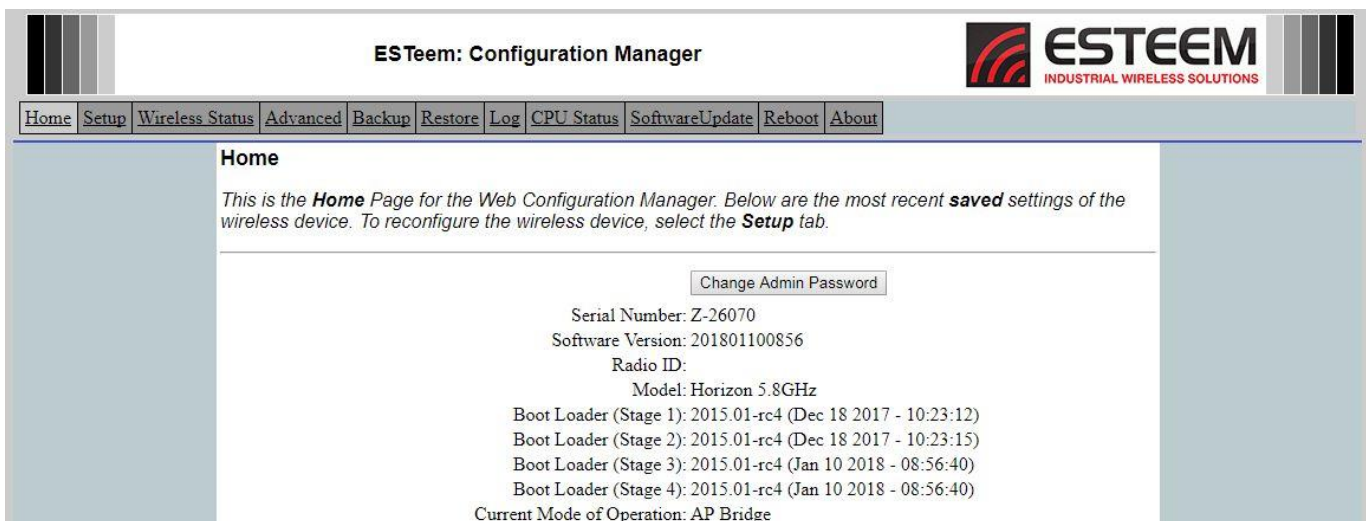


Figure 4: Boot Loader Warning Cleared