



Information about bootloader upgrade for Security Router models

- IE-SR-2TX-WL (Article No. 2682590000)
- IE-SR-2TX-WL-4G-EU (Article No. 2682560000)
- IE-SR-2TX-WL-4G-US-V (Article No. 2682580000)

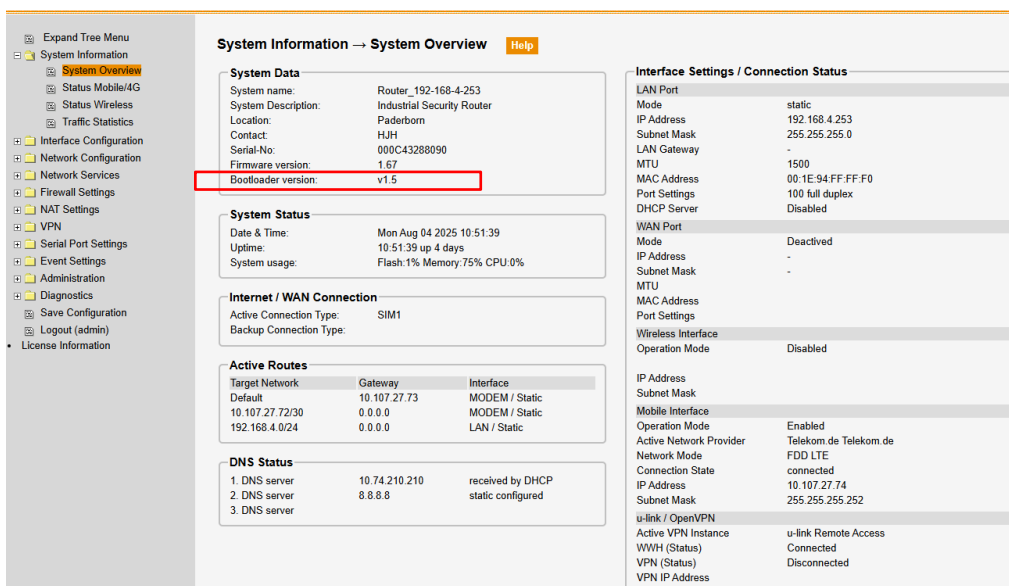
Note: Naming extension -V of US model stands for certified use of the Verizon cellular network additional to the other US cell phone providers.

General information why updating the bootloader to a version \geq V1.5 could be necessary.

- On routers with bootloader version V1.4 both RJ45 ports (LAN and WAN) behave **like an unmanaged 2-Port Ethernet switch for around 45 seconds after power-up**. This can lead to unwanted (uncontrolled) forwarding of network traffic from LAN to WAN port and vice versa. For example, any DHCP broadcast request incoming at LAN port at this early power-up time can arrive a DHCP server located at WAN port side. This would result in DHCP offers back to LAN devices, though normally they should get an IP address from a LAN DHCP server after power-up.
- After update to bootloader version V1.5 both RJ45 ports (LAN and WAN) are blocked immediately at power-up time and will take over their intended role according to the saved configuration during the boot process.
- Which bootloader version is installed can only be viewed on website “System Overview” → Section “System Data” (parameter “Bootloader version”) for
 - 4G Router models (IE-SR-2TX-WL-4G-EU / IE-SR-2TX-WL-4G-US-V) since firmware V1.60 (or newer) respectively
 - WLAN Router IE-SR-2TX-WL since firmware V1.48 (or newer).
- Generally, on any firmware version lower than mentioned versions V1.60/V1.48, bootloader version V1.4 is installed with behavior described above.
- On 4G Router models (IE-SR-2TX-WL-4G-EU / IE-SR-2TX-WL-4G-US-V) delivered with firmware V1.67 (or newer) respectively WLAN Router IE-SR-2TX-WL delivered with firmware V1.52 (or newer), new bootloader version V1.5 is already installed.

Steps for bootloader update:

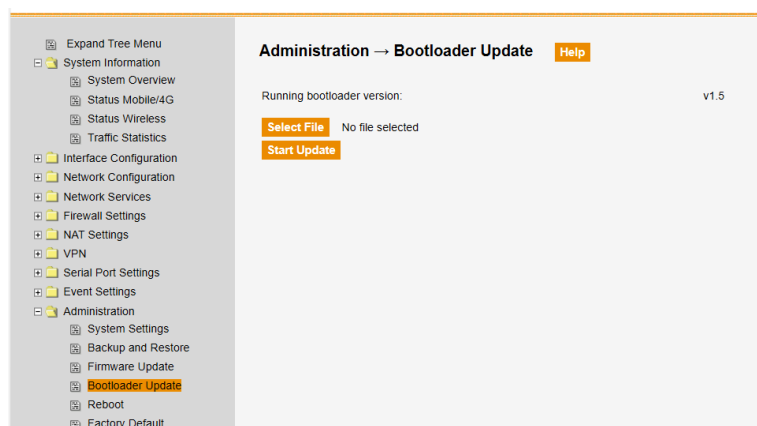
1. Update 4G Router models (IE-SR-2TX-WL-4G-EU / IE-SR-2TX-WL-4G-US-V) to firmware V1.67 (or newer) respectively WLAN Router IE-SR-2TX-WL to firmware V1.52 (or newer) **to show** new parameter “Bootloader version” in Webpage “System Overview” → Section “System Data”.



The screenshot displays the 'System Overview' page of a security router. The left sidebar contains a navigation menu with options like 'System Information', 'Status Mobile/4G', 'Status Wireless', 'Traffic Statistics', 'Interface Configuration', 'Network Configuration', 'Network Services', 'Firewall Settings', 'NAT Settings', 'VPN', 'Serial Port Settings', 'Event Settings', 'Administration', 'Diagnostics', 'Save Configuration', 'Logout (admin)', and 'License Information'. The main content area is titled 'System Information → System Overview' and includes a 'Help' button. It is divided into several sections: 'System Data' (showing system name, description, location, contact, serial number, firmware version: 1.67, and **bootloader version: v1.5**), 'System Status' (showing date & time, uptime, and system usage), 'Internet / WAN Connection' (showing active connection type: SIM1 and backup connection type), 'Active Routes' (a table with 3 columns: Target Network, Gateway, and Interface), and 'DNS Status' (a table with 3 columns: DNS server, IP address, and status). On the right side, there is a section for 'Interface Settings / Connection Status' which includes details for LAN Port, WAN Port, and Wireless Interface, as well as Mobile Interface settings like Operation Mode, Active Network Provider, Network Mode, Connection State, IP Address, and Subnet Mask.

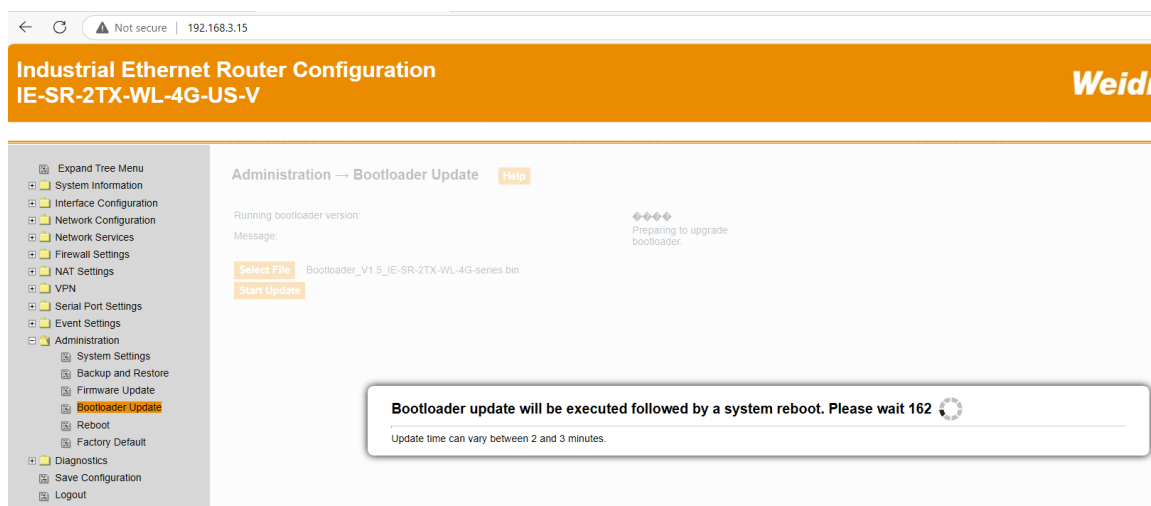
Note: Picture already shows updated bootloader version V1.5.

2. After firmware upgrade new tree menu item “Bootloader Update” is available in section “Administration”.



Note: Picture already shows updated bootloader version V1.5.

3. To upgrade the bootloader, go to website “Bootloader Update”, select bootloader file “*Bootloader_V1.5_IE-SR-2TX-WL(-4G)-series.bin*” and press button “Start Update”. After completion of the update process the Router automatically reboots and will be ready again (in total after 3 minutes maximum) by showing Webpage *System Information* → *System Overview* with updated bootloader version.



Note: Picture shows an outdated (not published) bootloader version with encrypted characters. Normally, bootloader version V1.4 is displayed to be upgraded with V1.5.

Note: Bootloader file “*Bootloader_V1.5_IE-SR-2TX-WL(-4G)-series.bin*” is included in the downloadable firmware files “*Firmware_IE-SR-2TX-WL-4G-EU&US_Vx.yy.zip*” for 4G models and in firmware file “*Firmware_IE-SR-2TX-WL_Vx.yy.zip*” for model IE-SR-2TX-WL (Only WLAN).