

# RUT300 Firmware Downloads

[Main Page](#) > [RUT Routers](#) > [RUT300](#) > **RUT300 Firmware Downloads**

This page contains firmware files for RUT300 devices. Look to the table below or the [changelog](#) to find download links.

To upgrade firmware using WebUI, follow the instructions in [RUT300 Firmware](#).

## RUT300

File	Type	Release date	Size	MD5	Changelog
<a href="#">RUT30X_R_00.07.07.1_WEBUI.bin</a>	Latest FW	2024.05.03	10.19 MB	c0216034a8be592ca724326a2e8ae3ea	<a href="#">Link</a>
<a href="#">RUT30X_R_00.07.06.10_WEBUI.bin</a>	Mass production FW	2024.04.04	10.13 MB	1c7a2958289eb77b9c66983757f114b7	<a href="#">Link</a>
<a href="#">RUT30X_R_GPL_00.07.07.1.tar.gz</a>	SDK	2024.05.03	18.76 MB	2aecb2774614b1c4cf4cf613ab832a2b	

**Note:** packages for [Package Manager](#) are independent from firmware and can be downloaded in the [Package Downloads](#) page.

## FW checksums

Checksums for firmware files can be found [here](#).

## Changelog

### [RUT30X\\_R\\_00.07.07.1](#) | 2024.05.03

- **New**
  - **Network**
    - WebUI: added internet status tracking configuration and overview widget
    - LAN: added a new IPv6 LAN status page
    - Static Leases: added a new IPv6 Static Leases page
    - WebUI: added custom domain name resolve option in “DNS” configuration page
    - Failover: added additional connection flush options
    - VRF: added initial Virtual Routing and Forwarding support
  - **Services**
    - Post/Get: added I/O invert support
    - DLMS Client: added persistent TCP connections
    - Events Reporting: added unexpected shutdown event
    - Modbus Client: added 64bit data types
    - IPerf3: added iPerf3 to Package Manager
    - DNP3 Outstation: added I/O objects

- Hotspot: added domain and subdomain options for external landing page
- **System**
  - WebUI: added the ability to generate random passwords for password input fields
  - WebUI: added reset to “Factory defaults” option
  - System: changed firmware certificate verification tool
  - IP Block: added time-based login attempt blocking
  - WebUI: added firmware update notification support
  - PAM: added the ability to set port for TACACS+
  - Logging: added multiple remote syslog servers support
- **Improvements**
  - **Network**
    - Static Leases: added possibility to use MAC with wildcard
    - Topology: changed network devices scanning application
    - WebUI: improved design of Status - LAN page
    - DHCP: simplified DHCP configurations in other pages and moved full DHCP configuration to a separate page
    - DHCP: removed default disabled server configuration for WAN interface
    - WebUI: simplified data entry of DNS forwardings by separating hostname and IP address fields
    - BGP: added Virtual Routing and Forwarding (VRF) support
    - BGP: added multiple BGP instance support
    - WebUI: adjusted responsive design breakpoints
    - Dnsmasq: updated dnsmasq to version 2.89
  - **Services**
    - Wireguard: added option to bind tunnel to a specific interface
    - OPC UA Client: added limits (10 servers, 20 groups, 50 nodes per server, 50 values per group)
    - DLMS Client: increased maximum count of connection sections to 30
    - DLMS Client: added short name referencing
    - SNMP: set strict default community access when IPv6 address is used
    - SNMP: improved sysName OID to set device's hostname
    - Hotspot: moved MAC blocking option from Access Control to Hotspot page
    - WebUI: added MAC authentication support when using RADIUS authentication mode
    - WebUI: moved licenses to footer
    - OpenVPN: added the bridge option for selecting the network device to be bridged with
    - OpenVPN: added possibility to create more than one TAP client
    - SSTP: updated package version to 1.0.19
    - Mosquitto: updated package version to 2.0.17
  - **System**
    - WebUI: added more strict password requirements for restoring backup
    - SMTP: added option to either not verify SMTP server or upload SMTP server's CA file to verify authenticity
    - WebUI: Added the ability to choose the ROOT CA when using certificates from the device
    - WebUI: unified time format to ISO8601 across the entire WebUI
    - WebUI: added ability to choose imported certificate and key as 'Server certificate' and 'Server key' in 'Access Control'
    - WebUI: added 'Hosts' and 'IP Addresses' options for 'Simple' certificate generation and certificate signing

- WebUI: changed firmware update option to server as a default option
- WebUI: improved first login password change logic
- Certificates: updated Root CA certificates
- GPL: added offline package preparation command for GPL builds
- Speedtest: added multiple connections support to improve accuracy
- Libcap: updated package version to 2.69

- **Fix**

- **Network**

- Topology: fixed showing interfaces with assigned VLAN
- WebUI: fixed static routing creation for GRE instance
- Network: fixed DHCPv4 relay mode enabling
- Failover: fixed Failover missing active rules when using multiple source and destination IP addresses
- WebUI: fixed network and failover interface metric sorting synchronization issue
- WebUI: fixed failover rule policy save issue with newly added WAN interface
- Interfaces: fixed failover value for new WAN being taken from WAN that was just deleted

- **Services**

- Modbus Client: allow using negative floating point values in requests
- Azure IoT Hub: fixed Data to Server minor WebUI dependency bugs
- Data to Server: fixed DLMS data formatting
- Data to Server: fixed Network link state data display
- DLMS Client: fixed segfault while reading profile generic COSEM object
- DLMS Client: fixed profile generic entries reading
- DLMS Client: fixed application memory allocation issues
- SSTP: fixed route adding when default route is enabled
- SNMP: fixed VLAN OID naming
- OpenVPN: added fixes for instance status tracking functionality
- OpenVPN: resolved uptime counting issues
- PPTP: fixed PPTP instance deletion problem
- Azure IoT Hub: fixed 'contentType' telemetry message parameter
- Hotspot: fixed password validation for locally created users and signed-up users
- Hotspot: fixed session invalidation after deleting registered user
- Hotspot: fixed firewall rule creation
- PPTP: fixed problem related with routes when failover is enabled
- WebUI: fixed data loading error in Input/Output > Post/Get page
- UPnP: updated package version to 2.3.4

- **System**

- Package Manager: fixed spinner message when restarting network after package upload or download
- Package Manager: fixed supported devices check when installing a package from server
- WebUI: fixed language install from uploaded package after upgrade with keep settings
- WebUI: fixed an issue when a user was not logged out after changing profiles
- Telnet: fixed segmentation fault during concurrent connections
- CLI: fixed enter key issue on mobile chromium based browsers
- System Users: fixed SSH session close after deleting user or disabling SSH access
- Profiles: fixed profile migration with installed packages
- JavaVM: fixed package installation
- WebUI: fixed Hotspot log page table search functionality

- Speedtest: fix missing download speed on some servers
- PAM: updated libpam to version 1.6.0

- **CVE Patches**

- CVE-2022-4603
- CVE-2022-23308
- CVE 2022-45061
- CVE-2023-0466
- CVE-2023-6129
- CVE-2023-7042
- CVE 2023-24329
- CVE 2023-27043
- CVE-2023-42366
- CVE-2023-46218
- CVE-2023-46219
- CVE-2023-46752
- CVE-2023-46753
- CVE-2023-48795
- CVE-2024-2397
- CVE-2024-25062
- CVE-2024-27913
- CVE-2024-22365

**[RUT30X\\_R\\_00.07.06.10](#) | 2024.04.04**

---

- Global changelog for **R\_00.07.06.10** - [LINK](#)

**RUT30X\_R\_00.07.06.8 | 2024.03.25**

---

- Firmware **R\_00.07.06.8** was removed due to an issue with inefficient memory allocation for LED control.

**[RUT30X\\_R\\_00.07.06.6](#) | 2024.03.04**

---

- Global changelog for **R\_00.07.06.6** - [LINK](#)

**[RUT30X\\_R\\_00.07.06.5](#) | 2024.02.21**

---

- Global changelog for **R\_00.07.06.5** - [LINK](#)

**[RUT30X\\_R\\_00.07.06.3](#) | 2024.01.17**

---

- Global changelog for **R\_00.07.06.3** - [LINK](#)

## [RUT30X\\_R\\_00.07.06.1](#) | 2024.01.04

- **Fix**
  - **Services**
    - Fixed issue with NTPclient zombie processes

## [RUT30X\\_R\\_00.07.06](#) | 2023.12.20

- **New**
  - **Services**
    - Added OPC UA Server
    - Added the ability to set port for TACACS+ in PAM service
    - Added switch to enable using root certificate authority for MQTT alarms in Modbus Client services
    - Added new alarm action "Ubus event" in Modbus Client services
    - Added new input "Modbus alarms" in Data to Server service
    - Added wget ping subtype support in Events Reporting service
    - Added new I/O SNMP OID that returns numeric I/O state
    - Added TLS support for OverIP serial functionality
  - **WebUI**
    - Renewed user interface design
    - Added network interface name change functionality
    - Added last resort configuration option for multiwan policy rules
  - **System**
    - Added ability to enable/disable SSH access for specific users in System Users
    - API support
- **Improvements**
  - **Services**
    - Expanded GRE VPN keep alive functionality to disable routes from unreachable tunnel
    - Added PKCS#12 certificate container authentication method in IPsec VPN
    - Added TLV message\_payload support for SNMP service
    - Added Purple.ai configuration profile
    - Replaced option "No leading zeros" with "Remove all zeros" in Over IP serial functionality
    - Added reboot on storage device disappearance and re-appearance
  - **WebUI**
    - Improved Events Log page loading by adding asynchronous pagination
    - Removed requirement for Diffie-Hellman parameters in OpenVPN service
    - Added improvements for creating OpenVPN IPv6 configurations
    - Added auto redirect after changing router's IP address or port
    - Added "Interface" dropdown for interfaces selection in Wake on LAN service
    - Increased Data to Server service MQTT topic length limit to 65535 characters
    - Added OSPF external routes section to Status page
    - Moved device menu entry "Reboot" to header menu
  - **System**
    - Added Mosquitto CVE patch 2023-28366
    - Added Mosquitto CVE patch 2023-3592
    - Updated cURL version to 8.4.0
    - Updated kernel version to 5.4.259
    - Added RMS data display to generated troubleshoot

- Added downloaded Package Manager packages list to generated troubleshoot
- Added process activity load list to generated troubleshoot
- Changed default OPKG feed to use Teltonika's URL

- **Fix**

- **Network**

- Fixed DMVPN firewall rule creation issues
- Fixed Failover missing active rules when using multiple source and destination IP addresses

- **Services**

- Fixed SSH module enable in PAM service
- Added minimum free space check when saving logs to flash in Logging service
- Fixed "Set multiple coils" function sending too many bytes in Modbus Client services
- Fixed multiple Events Reporting messages being sent when Firewall configuration is changed
- Fixed VRRP instances advertising wrong virtual IPs
- Added Hotspot information in SNMP MIB file
- Fixed registered Hotspot Local Users showing random username
- Fixed selection of MAC Auth for LAN interfaces in Hotspot service
- Fixed inconsistent Hotspot login behaviour when using MAC Auth with Password
- Fixed instance shutdown after last local user deletion
- Fixed RMS Hotspot data display for devices without WiFi support
- Fixed serial timeout not working in Over IP serial functionality
- Removed "Echo" option in Modbus TCP over Serial functionality
- Fixed CRC verification failing when CRC is correct in Modbus TCP over Serial functionality
- Fixed crash when getting unexpected messages from RTU in Modbus TCP over Serial functionality

- **WebUI**

- Fixed side menu style issues when Japanese language is used
- Fixed displaying of vendor names in Topology page
- Fixed language packs being selectable when still in Package Manager queue
- Added ability to configure IPv6 BGP peer
- Fixed realtime graphs responsive design issues
- Fixed Network Shares users deletion
- Fixed not all LAN interfaces shown in dropdown in Hotspot service page

- **System**

- Patched FRR CVE-2023-38406
- Patched FRR CVE-2023-38407
- Patched FRR CVE-2023-41358
- Patched FRR CVE-2023-41360
- Patched FRR CVE-2023-41909
- Patched FRR CVE-2023-47234
- Patched FRR CVE-2023-47235
- Patched OpenSSL CVE-2023-3446
- Patched OpenSSL CVE-2023-3817
- Patched LibXML2 CVE-2023-39615
- Patched LibXML2 CVE-2023-45322
- Patched FFMPEG CVE-2021-28429
- Patched FFMPEG CVE-2022-48434

- Patched dnsmasq CVE-2023-28450
- Fixed running out of space when SSHFS is mounted in /tmp while generating troubleshoot

## [RUT30X\\_R\\_00.07.05.4](#) | 2023.11.09

- **Improvements**

- **WebUI**

- Improved asynchronous pagination in events log pages
    - Optimized Overview page load
    - Added resource loading cancellation after switching to different page

## [RUT30X\\_R\\_00.07.05](#) | 2023.10.09

- **New**

- **Network**

- Software Offloading enabled on default configuration

- **Services**

- DLMS Client package
    - 7zip package
    - TincVPN package
    - Added router uptime parameter to SNMP
    - Custom MQTT publisher/subscriber topics definition support
    - Alternative configuration file upload support for MQTT Broker service
    - Device Provisioning Service support for Azure IoT Hub service
    - Speed Test package

- **WebUI**

- Firewall status page
    - Page search feature
    - Network Topology page
    - "Allow insecure connection" option for MQTT TLS protocol in Data to Server service
    - Package Restore feature Enable/Disable option
    - Hotspot client connection/disconnection trap option for SNMP service
    - Added Events log trap option for SNMP service
    - Confirm dialog when cancelling a verified package in Package Manager
    - "Bridge ALPN" option for Bridge configuration in MQTT Broker service
    - New subtypes of events that specify a specific port on "Events Reporting" and "SNMP Trap rules" pages
    - Specific firmware packages repository link in Package Manager page
    - Ability to enter decryption passphrase for encrypted private keys
    - "Reconnect" button in RMS page
    - New event "Device startup completed" in Events Reporting service
    - Port status and configuration page
    - New "Server+Client" work mode in OverIP Serial Utility
    - New "Connect on data" action in OverIP Serial Utility
    - Multiple Client instance support in OverIP Serial Utility
    - IP6 table configuration option for DHCPv6 protocol in Network -> WAN page

- **System**

- Mechanism to rebrand WebUI using GPL
    - Possibility to create web applications with closed-source GPL

- **Improvements**

- **Network**

- Moved FRR VTYSH package to package manager
    - Made newly created Firewall Traffic, NAT rules and Port Forwards disabled by default
    - Improved Interfaces to enable IPv6 DHCP server when mobile v6 or v4v6 PDP type is set

- **Services**

- Added Modbus Serial functionality
    - New reworked Data to Server
    - UPNP moved to package manager
    - Added IPv6 support for Modbus TCP Server/Client services
    - Refactored Azure IoT Hub service
    - Improved resiliency to timeouts in Modbus Client service
    - Added PDU data type to Modbus read requests
    - Added new formatters for MQTT alarms in Modbus Client service
    - Added main section to make test functions independent in Modbus Client service
    - Improved WAN IP register reading time in Modbus service
    - Sped up default profile and profile template generation for Profiles functionality
    - Optimized profile change time for Profiles functionality
    - Added IPv6 support for Stunnel VPN
    - Added MAC blocking for client connections after set amount of failed login attempts in Hotspot service
    - Improved TCPdump by allowing to capture packets from any interface
    - Added OSPF support for DMVPN
    - Updated Hotspot password hashing to sha512
    - Added I/O pin name to trap notification message

- **WebUI**

- Reorganized menu
    - Updated header design
    - Split Interfaces configuration in Advanced mode into two pages: WAN and LAN, identically as in Basic WebUI mode
    - Moved Interfaces IPv6 configuration into separate tab
    - Added client/server status information in OpenVPN instance overview page
    - Added more IPv6 information to interface status in Interfaces page
    - Removed "Custom delegated IPv6-prefix" field from DHCPv6 configuration in Interfaces page
    - Disabled DHCPv6 interface editing while in basic mode
    - Refactored custom DHCP options into separate modal
    - Added automatic start and end IP allocation for DHCP server configuration in Interfaces
    - Added client/server status information in L2TP VPN page
    - Added "MTU" field to L2TP client configuration page
    - Added CHAP, PAP and MSCHAP-v2 authentication fields to L2TP instance configuration
    - Added more detailed IPsec VPN status information
    - Encryption AES-256-CBC added as default in OpenVPN
    - Added "Authentication algorithm" support to OpenVPN configuration with static key mode
    - Added GRE (DMVPN) VPN tunnel source support to any instead of specific interface



- Improved Hotspot landing page theme package removal
- Added upload and download theme functionality to Hotspot Landing page
- Improved ZeroTier VPN bridge configuration
- Added ability to adjust order of rules in Firewall page
- Added IPv6 RAW table to be displayed in Status -> Firewall
- Improved file upload component's visual appearance
- Change "Allow anonymous" option default value to 0 in MQTT Broker
- Added option to specify "Client ID" in MQTT Publisher
- Added functionality to select specific interface in Web Filter service
- Allowed to select FTP server subfolder in Traffic Logging service
- Renamed various service master/slave naming convention in config files, package names and webUI to client/server
- Added "Create static" button in Status -> Network -> LAN which bind DHCP lease for device
- Removed redundant "Action" option in Periodic Reboot
- Added IPv6 support in OverIP serial utility
- **System**
  - Updated kernel version to 5.4.251
  - Updated UCI version to 2021-10-22
  - Updated SSHFS version to 3.7.1
  - Updated FRR suite to 8.4.2
  - Updated cURL version to 8.2.0
  - Updated TCPdump version to 4.99.4
  - Updated C-ares version to 1.19.1
  - Updated curl version to 7.88.0
  - Updated iproute2 version to 5.19.0
  - Updated libubox package version to 2021-08-19
  - Added CVE patch CVE-2023-2650
  - Added additional firmware information in CLI prompt banner
  - Connection mode LED now blinks on data transfer
  - Changed "routername" to "devicename" in system config file
  - Made all clients get disconnected out once dropbear service is disabled
  - Improved firmware downgrade restrictions for certain regions
  - Device name is now displayed in browser tab when in WebUI login page
  - Added NF conntrack information in generated troubleshoot archive
- **Fix**
  - **Network**
    - Fixed UDP Broadcast Relay service crashing on start without physical network device
    - Fixed wrong or empty WAN state info
    - Fixed connection tracking for main interface in Failover
  - **Services**
    - Fixed reconnecting to inactive connections for Modbus Server service
    - Fixed Modbus Client response after reboot write request
    - Fixed Modbus Server to show error when trying to get operator name without SIM
    - Updated Modbus Client to handle large numbers of schedule rules, when frequency is set to schedule (Daini)
    - Fixed "Input" rule displaying incorrect and missing ports in Network -> Firewall -> Traffic Rules
    - Fixed WireGuard VPN endpoint resolving problem

- Peer cache is no longer deleted when ZeroTier service is restarted
- Fixed RMS data collection about the list of devices connected to WiFi
- Fixed showing incorrect Internet state in RMS
- Fixed WiFi client info display in RMS
- Implemented error handling when device is blocked or unrecognized by RMS
- Fixed L2TP client sometimes not adding routes on successful connection
- Fixed NTP time sync with browser functionality in some edge cases
- Fixed reinstalled packages" verification when device name is changed
- Fixed an issue where signal query would return invalid value instead of error in case of no signal in MQTT Publisher service
- Fixed OpenVPN firewall rule creation for both IPv4 and IPv6
- Fixed OpenVPN server crash loop after changing authentication from TLS to Static Key
- Fixed IPsec VPN connection problem with small lifetime values
- Fixed IPsec "Default Route" not working when Flow Offloading is enabled
- Fixed an issue where system directory could be used as a mount point in SSHFS service
- Fixed IP block feature to unblock an OpenVPN IP address on successful authentication
- Fixed package installation process bug when packages have different architecture names
- Added "bearer token" authentication functionality in Dynamic DNS
- Fixed MQTT Broker "local\_port" option keep settings migration
- Remove public keys when key-based authentication is disabled in Access Control
- Fixed "Parity" field "Mark" and "Space" options being ignored in DNP3 Serial services
- Corrected SNMP MIB file syntax according to standards
- Fixed returned port count in SNMP
- Fixed disabled CLI remote access taking up a session slot
- Fixed data being lost when sending large packets to serial devices using OverIP serial utility
- Fixed OverIP possible serial device overflow and minor bugs
- More robust error recovery for RTU communication in Modbus Client service
- Fixed user deletion in Network Shares service
- Fixed router reboot inconsistencies after Storage Memory Expansion

#### ◦ **WebUI**

- Fixed empty events cards in Overview page when no content is available
- Fixed modal form inputs not clearing upon closing after nested modal is saved
- Fixed select menu closing when selecting custom option
- Fixed multi select expanding table row when adding new values
- Fixed global section caching after deleting a section in a table
- Fixed unpredictable search logic in tables
- Fixed interfaces reordering by metrics in Failover page
- Removed ability to select ports on ICMP and ESP protocol in Failover page
- Fixed wrong status when interface is disabled in Failover page
- Fixed firewall zone and rule creation/deletion on VPN configuration creation/deletion
- Fixed STP enabling issue in Interfaces
- Fixed EIGRP status info in Dynamic Routes
- Fixed issue with custom DHCP options where you could not have multiple values per rule

- Fixed Routing/NAT Offloading section display in Network -> Firewall -> General Settings when device is not supported
- Fixed SSH/HTTP/HTTPS/ICMP setting in Network -> Firewall -> Attack Prevention page
- Fixed failing Firewall rules with united protocol formats
- Fixed zone select component not closing options menu when selecting an option in Firewall pages
- Fixed memory leak when cancelling file uploads on Chromium-based browser
- Fixed group settings saving by removing deprecated ":section" routes in Administration -> User Settings -> System Users
- Fixed allowing IDs above 247 in Modbus Client service
- Fixed selecting SIM in Modbus Client service Alarms
- Fixed Modbus Alarm telephone number limit
- Fixed to show available options for test requests on error in Modbus Client service
- Fixed Modbus Alarm I/O pin display values
- Fixed issue when creating instance named "gre" does not show in GRE VPN
- Remote endpoint field now allows underscore character in IPsec VPN
- Fixed ZeroTier wrong service status display in Status -> Services
- Fixed problems with L2TP/PPTP VPN firewall rules automatic creation
- Fixed problem related to the enable/disable toggle in OpenVPN instance overview page
- Added fixes for key-direction missing problem when uploading OpenVPN config file
- Fixed login page read-only inputs after custom user logout
- Fixed issue when double clicking firmware upgrade cancel button returned error
- Fixed Package Manager prompt message to appear when package requires network restart
- Fixed showing in queue packages when they contained special symbols in the Package Manager page
- Fixed various visual Side Widget bugs
- Fixed Data to Server DNP3 filter from flash display
- Fixed incorrect source data displayed in Realtime Data -> Connections table
- Fixed memory expansion confirmation prompt title
- Fixed incorrect configuration saving in Hotspot 2.0 service
- Disabled password hashing for new user creation in Hotspot service
- Fixed Hotspot landing page themes saving bug
- Fixed test email sending to more than one recipient in Events Reporting page
- Fixed VLAN OID values in SNMP service
- Output proper error message in case of hardware not being supported in Firmware Upgrade
- Fixed being able to open side widget when user does not have read access
- Fixed profile creation when current configuration is not present
- Fixed wrong protocol data display in "Access control" page
- Fixed LAN interfaces not showing up before WAN interfaces in Status -> Realtime Data -> Traffic
- Fixed disabling DLNA service when USB drive is removed
- **System**
  - Patched CVE-2023-0386 vulnerability
  - Patched CVE-2023-0464 vulnerability
  - Patched CVE-2023-0465 vulnerability
  - Patched CVE-2023-2602 vulnerability

- Patched CVE-2023-3772 vulnerability
- Patched CVE-2023-4128 vulnerability
- Patched CVE-2023-33476 vulnerability
- Patched CVE-2023-28484 vulnerability
- Patched CVE-2023-29469 vulnerability
- Patched CVE-2023-31490 vulnerability
- Patched CVE-2023-36369 vulnerability
- Patched CVE-2023-48174 vulnerability
- Delayed Custom Scripts execution on boot, after storage devices are mounted
- Fixed Custom Scripts permissions after save
- Changed certificate expiry calculation mechanism to fix Y2K38 bug
- Fixed downloading of certificates that have a space in their name in Administration  
-> Certificates -> Certificates Manager
- Fixed Events Log database rotation to prevent log partition space exhaustion
- Fixed duplication and sorting of all events IDs in Events Log
- Fixed FOTA crash when current hours is with leading 0
- Fixed crontab job removal after disabling FOTA
- Changed Mosquitto build options to not include cJSON library
- Fixed device name resetting to default upon refresh in Administration
- Fixed backup upload validation with memory expansion

## [RUT30X\\_R\\_00.07.04.5](#) | 2023.07.24

- **Improvements**
  - **Network**
    - Added metric field support in BGP Route-maps page

## [RUT30X\\_R\\_00.07.04.4](#) | 2023.06.26

- **Improvements**
  - **Services**
    - Improved UPNP lease file validation
    - Improved DLNA 'Database directory' field validation to not allow ', ` and spaces
  - **System**
    - Device name is now displayed in browser tab when in login page
- **Fix**
  - **Network**
    - Patched CVE-2023-32233 vulnerability
    - Fixed default networks in WAN firewall zone and possibility to add network that is not yet created
  - **Services**
    - Fixed connection establishment for RMS MQTT service
    - Implemented partial restart when connection with RMS server fails
    - Fixed device name resetting to default upon WebUI page refresh
    - Fixed being able to set device name without passing validations
    - Fixed WireGuard port change in firewall traffic rule when modifying instance port

## [RUT30X\\_R\\_00.07.04.3](#) | 2023.05.11

- **Improvement**
  - **System**

- Optimized firmware image size
- Removed SSH RSA key generation
- Added SSH ECDSA key generation
- **Fix**
  - **System**
    - Fixed an issue on bootloader web recovery hanging with certain firmware sizes

## [RUT30X\\_R\\_00.07.04.2](#) | 2023.04.18

- **New**
  - nftables support
- **Improvement**
  - **WebUI**
    - Improved Overview page performance
  - **System**
    - Changed hostname to router name
    - Updated OpenSSL to version 1.1.1t
    - Updated CA certificates to version 20211016
    - Updated libiwinfo to version 2022-08-19
- **Fix**
  - **Network**
    - Fixed Port-based VLAN ID calculation issue
  - **Services**
    - Fixed event text for configurable inputs/outputs on I/O Juggler
    - Fixed I/O PIN3 value not changing via MODBUS TCP
    - Added I/O status request error handling in various WebUI pages when the I/O service is booting up
    - Fixed OpenVPN enabling/disabling when using Password or TLS/Password authentication modes
    - Fixed OpenVPN keep alive setting migration issue
    - Fixed PPTP server name setting migration issue
    - Fixed missing WebUI issue caused by Email Relay installation
    - Fixed NTP's Operator Station Synchronization memory leak issue
    - Fixed test email validation
  - **System**
    - Fixed libcares vulnerability CVE-2022-4904
    - Fixed frr vulnerability CVE-2022-37035
    - Removed ability for non root users to edit scripts that get executed as root

## [RUT30X\\_R\\_00.07.04.1](#) | 2023.03.24

- **Fix**
  - **Network**
    - Fixed Data Limit issue

## [RUT30X\\_R\\_00.07.04](#) | 2023.03.07

- **Improvements**
  - **WebUI**
    - Improved data persistence between page refreshes

- Improved page navigation behavior
  - Improved redirect logic to open configuration edit modals
- **Services**
  - Added MQTT support to I/O Juggler
  - Added a frequency option 'schedule' Modbus Master
  - Added pagination to Events Reporting overview
  - Added limit to Events Reporting rule list
  - Added email logging for Events reporting
  - 'Sync with browser' button in the NTP page now also synchronizes the time zone
  - Added a limit of 30 for NTP instances
  - Made Networks selections in the 'Traffic Logging' page to display interface choices dynamically
  - Added "make before break" option to IPsec configuration
  - Added MODBUS TCP connection handling layer to MQTT-MODBUS Gateway
  - Improved MODBUS Master connection handling to reduce connection count
  - Updated modbus request error messages
  - Added OpenVPN server ip block support
  - Added MQTT support for MODBUS Master alarms
  - Added the possibility to get the device's Ethernet port data via SNMP
  - Improved error messages in the Serial Utilities page
- **System**
  - Updated bash to version 5.1.16
  - Added detailed FW update failure error message to Events Log
  - Improved firmware upload/validation error messages
  - Updated Turkish language support
  - Added protocol column to IP block page
  - Added "vpns.log" file to the Troubleshoot package
  - Added Wireguard tunnel information to the Troubleshoot package
  - Updated default admin group access rights
- **Fix**
  - **WebUI**
    - Fixed Services page not displaying data after Thingworx package is installed
    - Added DNP3 to the 'Status > Services' page
  - **Network**
    - Fixed interface priority change issue
    - Fixed a Custom Firewall Rule editing issue
    - Fixed DMZ configuration saving while it is disabled
    - Fixed Port Scan script execution failure
    - Fixed Firewall zone duplication issue
  - **Services**
    - Fixed the listing of slow USB devices such as HDDs
    - Fixed DNP3 serial master not working when Stop bits are set to 2
    - Fixed DNP3 requests not deleting along with instance
    - Fixed DNP3 memory leak occurring after spamming the test request button
    - Fixed Serial Over IP related Firewall rule setting
    - Fixed I/O Scheduler overlapping instances issue
    - Fixed Input/Output image pin colors
    - Fixed issue that causes ADC subscribers to receive notifications for when ACL is active
    - Fixed Data To Server JSON format %n, %N and %s flag issues

- Fixed Events Reporting email data clean
- Fixed Events Reporting missing config selections
- Fixed GRE Tunnel's 'Tunnel source' field validation when the source is custom
- Fixed IPsec instance deletion after removing DMVPN package
- Fixed IPSec migration via Backup file when DMVPN is configured
- Fixed IPsec naming issue when the includes an equals sign
- Fixed L2TP client to use correct interface on failover events
- Fixed L2TP over IPsec connection dropping issue when connecting from a Windows client
- Fixed MODBUS database size limiting issue
- Fixed MODBUS MQTT Gateway client ID input
- Fixed MODBUS TCP Slave RSSI value
- Fixed MODBUS test button returning errors when several non-connected devices are configured
- Fixed NTP Etc/GMT+1 and Etc/GMT-1 time zones
- Fixed OpenVPN password validation when no CA certificate is uploaded or 'custom' template is selected
- Fixed OpenVPN Static Key configuration saving by making Static key upload required
- Fixed OpenVPN TLS client creation issue while LAN is down
- Fixed Package Manager displaying non-existent packages
- Fixed Package Manager errors showing up after successful installations
- Fixed Periodic Reboot entry duplication after a power cycle
- Fixed PPTP 'Client to client' option not being applied after save
- Fixed receiving excessive device state emails after a reboot is initialized over RMS
- Fixed WebUI unavailability after unsuccessful package install
- **System**
  - Fixed vulnerabilities CVE-2022-3524, CVE-2022-3566, CVE-2022-3567, CVE-2022-39188, CVE-2022-45934, CVE-2022-47929
  - Fixed bash vulnerability CVE-2022-3715
  - Fixed CGI-IO file download vulnerability CVE-2022-38333
  - Fixed libxml2 vulnerability CVE-2022-40304
  - Fixed libcurl vulnerabilities CVE-2022-43551 and CVE-2022-43552
  - Improved file upload logic
  - Fixed GPL firmware compilation with selected Tinc package
  - Fixed OpenVPN Static Key migration via keep settings issue
  - Fixed NTP time zone name setting migration when the name contains whitespaces
  - Fixed language setting issue
  - Fixed integer validation on industrial services

## [RUT30X\\_R\\_00.07.03.4](#) | 2023.02.09

- **Fix**
  - **Network**
    - Fixed CVE-2023-32349 vulnerability
  - **Services**
    - Sanitized tcpdump storage location

## [RUT30X\\_R\\_00.07.03.2](#) | 2023.01.13

- **New**
  - **System**

- Japanese language
- **Fix**
  - **Network**
    - Fixed VLAN option setting when changing VLAN ID

## [RUT30X\\_R\\_00.07.03.1](#) | 2023.01.03

- **Improvements**
  - **System**
    - Remove front-end certificate validation
- **Fix**
  - **Services**
    - Fixed libxml2 vulnerability CVE-2022-40303
    - Fixed an IPsec Phase one & two setting migration issue
    - Returned missing udp\_client\_count option to Over IP mode
  - **System**
    - Fixed JSON key parsing; keys can now be any printable character sequence
    - Fixed memory leak in 'session' module
  - **WebUI**
    - Fixed file pretty name parsing

## [RUT30X\\_R\\_00.07.03](#) | 2022.12.16

- **New**
  - **Network**
    - Firewall DMZ page
  - **Services**
    - Java package
    - SFTP server support
    - OPC UA client
    - Hotspot page
  - **System**
    - Portuguese language
    - Spanish language
    - Turkish language
    - Email Relay package
  - **WebUI**
    - New Web menu design
- **Improvements**
  - **Network**
    - Updated modem handling, attachment, tracking and connection establishment processes
    - Added the possibility to select multiple ports in all firewall port fields
    - Added 'Match' traffic by type option to firewall traffic rules
    - Added DNS servers and routing table fields to the Wireguard page
    - Improved generating network topology
    - Moved Relayd, UDP Relay & Static Leases to the Interfaces menu section
    - Update Firewall Traffic Rules page with DSCP and MARK options
    - Added keepalive, holdtime and connect timers to BGP configuration
    - Added 'Use gateway metric' to network protocols web interface



- Added more DHCPv6 client events to system log
- Moved IP Filter rules from Modbus TCP Gateway and Over IP services to Firewall page
- Added wget tracking method to WAN Failover
- Added interface checks to remove inaccurate Failover events from the Event Log
- **Services**
  - Added format button for each USB device in USB Tools General page
  - Reduced waiting time during storage device setup for Memory Expansion
  - Optimized Storage Memory Expansion package size
  - Replaced ntfs-3g with kernel-mode driver
  - Added USB to Serial support for Modbus, MQTT Modbus Gateway, NTRIP, DNP3
  - Updated Zerotier web interface
  - Added IPsec Flush connection option on tunnel initialization
  - Added MODBUS slave regfile validation
  - Added delay, number of timeouts, always reconnect options to MODBUS Master service
  - Added DMVPN Phase 2 and Phase 3 support
  - Added synchronization counting to NTP client
  - Expanded the data that is sent to the Cumulocity cloud with device log, mobile data usage and GPS data
  - Added 'Unregister' button to RMS page
  - Added new data monitoring options to SNMP: configuration state of wireless, smart queues & VLANs
  - Updated Zerotier package to version 1.10.1
  - Added automatic package removal upon failed installation in Package Manager
  - Added option to describe custom routing table and MTU auto counting to Wireguard VPN
  - Added IP blocking to MQTT Bridge for failed login attempts to prevent bruteforce attacks
  - Updated sqm-scripts to version 1.5.1
  - Improved MODBUS Master service: added multiple datatypes, added multiple register reading for alarms
  - Added monthly reboot option to periodic reboot function
  - Added support for multiple custom option selection to SSTP configuration
  - Added PKCS12 certificate chain support to OpenVPN
  - Improved MQTT to support multiple port listening, multiple bridge connections, notification settings and added support for custom configuration file
  - Added QoS selection to MQTT Modbus Gateway
  - Improved RAM usage during upload and installation of packages via Package Manager
  - Updated curl to version 7.86.0
  - Added brute-force prevention measures to Post/Get
  - Added automatic private and public key generation to Wireguard VPN
  - Added multiple Remote source IP support to IPsec
  - Added the possibility to configure multiple IPsec phase 1 and phase 2 proposals
  - Added functionality to rotate log file when log is saved to Flash memory
  - Improved performance while fetching packages on repeat visits to the Package Manager page
- **System**
  - Added a 'test mail' button to the Administration -> Recipients page
  - Added option to clear blocked IPs in the Access Control page after reboot

- Updated Web Request-Response core logic
- Added certificate validation to all services that support certificate upload
- Updated URL protocol validations
- Removed profile update requests during Save & apply
- Optimized profile switching logic
- **WebUI**
  - Added bootloader version to the Device section in the System page
  - Added configuration page shortcuts to Overview page widgets
  - Added tooltip in Overview that show free, used and total RAM/Flash values on mouse cursor hover
  - Updated network interfaces protocols web interface
  - Updated 404 page to include navigation menu
- **Fix**
  - **Network**
    - Fixed CVE-2023-32350 vulnerability
    - Fixed jumbo frames MTU issue
    - Added the 'Any' choice to source & destination IP address field in NAT rule edit
    - Fixed NHRP web interface issues
    - Fixed WAN interface configuration interfering with LAN
    - Fixed Wired WAN connectivity issue when Failover interfaces are disabled
    - Fixed Failover fallback issue
  - **Services**
    - Fixed Printer service starting issue
    - Fixed Printer service boot issues
    - Fixed DLNA service reload issues on USB drive insert/remove
    - Fixed relay state switching
    - Fixed Save & Apply issue with ADC/ACL type condition on I/O Juggler
    - Added I/O restart on configuration profile change
    - Fixed I/O voltage range display for power socket pins
    - Fixed SMNP OID for I/O state
    - Removed unnecessary field from the Port Mirroring page
    - Fixed dbus vulnerability CVE-2020-35512
    - Fixed dnsmasq vulnerability CVE-2022-0934
    - Fixed ext4 vulnerability CVE-2021-3428
    - Fixed kernel vulnerabilities CVE-2021-3669, CVE-2021-4203, CVE-2022-1353, CVE-2022-3435, CVE-2022-20008, CVE-2022-30594
    - Fixed libxm12 vulnerability CVE-2022-29824
    - Fixed Linux vulnerabilities CVE-2021-4148, CVE-2022-0480, CVE-2022-1055, CVE-2022-0886, CVE-2022-2663, CVE-2022-36879 for v5.4
    - Fixed MQTT DoS vulnerability CVE-2021-41039
    - Fixed privoxy vulnerability CVE-2021-44542
    - Fixed python3 vulnerability CVE-2022-42919
    - Fixed strongswan vulnerabilities CVE-2021-41991, CVE-2021-45079
    - Fixed uboot vulnerabilities CVE-2022-30552, CVE-2022-30790
    - Fixed switching between RMS connection types while the device is unregistered
    - Fixed reload issues in website blocking feature
    - Fixed IPsec PSK secret required field validation
    - Fixed bandwidth limiting after QoS is enabled for the first time
    - Fixed Dropbear issues when logging in over IPv6
    - Fixed Modbus status in Status -> Services page

- Fixed Azure IoT Hub application issues when sending large volumes of data
- Fixed Azure IoT Hub MQTT password validation
- Fixed DMVPN configuration migration issue
- Fixed DMVPN duplicate select options, added suffix to mobile interfaces to use IPv4
- Fixed DMVPN IPsec connection issue
- Fixed DMVPN mobile interface 'Keep settings' migration issue
- Fixed Dynamic DNS long hostname text display issue
- Fixed Events Reporting memory leak issue
- Fixed Events Reporting not triggering after flipping an I/O slider
- Fixed FOTA cron job not starting after factory reset
- Fixed IPsec local firewall option parsing
- Fixed IPsec tunnel creation issue when compatibility mode is used and the tunnel name contains an underscore
- Fixed L2TP, PPTP, SSTP state display in the Status -> Services page
- Fixed NTP pool hostname validation
- Fixed OpenVPN certificate remove with Static key and TLS authentication methods
- Fixed OpenVPN configuration saving issue when using HMAC key authentication
- Fixed OpenVPN custom dev name transformation to correct format
- Fixed OpenVPN device name setting logic when uploading config from file
- Fixed OpenVPN instance status display
- Fixed OpenVPN TAP (bridged) configuration detection
- Fixed Qos configuration saving issue occurring after instance deletion
- Fixed RMS JSON incorrect WAN state and IP information
- Fixed RMS step access issue in the Setup Wizard page
- Fixed SNMP issues after reboot while using a Hotspot
- Fixed SNMP generating MIB files for devices in accordance with to their hardware
- Fixed SNMP traps not working after SNMP is installed from server
- Fixed SSTP client route creation issue
- Fixed UPNP secure mode not turning off issue
- Fixed Wireguard route to endpoint issue
- Fixed manual package installation for queued packages
- Fixed NAT Rules dependency from IPsec web instance
- Returned usleep utility
- Updated Australian and South African NordVPN server IP addresses
- **System**
  - Fixed certificate signing issues
  - Fixed Telnet, CLI access blocking after max invalid tries
  - Fixed FW upgrade with 'Keep settings' while low free space is available
  - Fixed backup file duplication issue
  - Fixed network device handling in system
- **WebUI**
  - Fixed side widget accessibility during first login
  - Fixed file upload issues
  - Fixed drag and drop issue in the Traffic Rules page
  - Fixed protocol display in the overview of the Interfaces page
  - Fixed blocked IP settings migration during a FW upgrade with the 'Keep settings'
  - Fixed login errors after browser tab restoration
  - Fixed redirect to newly set IP address after Interface configuration
  - Fixed firmware upgrade verify spinner not closing

- Fixed an issue with file upload via drag and drop

## [RUT30X\\_R\\_00.07.02.7](#) | 2022.09.12

- **Fixes**

- Fixed CVE-2022-1012 memory leak vulnerability
- Fixed CVE-2022-37434 kernel vulnerability
- Fixed interface option reset after VLAN ID change
- Removed memory leak on port events
- Fixed WiFi Scanner out of range crash when iterating collected data

## [RUT30X\\_R\\_00.07.02.6](#) | 2022.08.24

- **Fixes:**

- Fixed OpenVPN tls-auth and tls-crypt option names

## [RUT30X\\_R\\_00.07.02.5](#) | 2022.08.12

- **Improvements:**

- Updated curl to version 7.83.1
- Updated firmware validation error messages
- Added multiple source IP address support to the Port Forwards page

- **Fixes:**

- Fixed CVE-2022-32205, CVE-2022-32206, CVE-2022-32207, CVE-2022-32208 curl vulnerabilities
- Fixed CVE-2022-30065 busybox vulnerability
- Fixed file upload path traversal
- Removed Data to Server limit to process less than 10 instances
- Fixed Data to Server 'out of memory' crashes when database is full or has a large amount of data
- Fixed OpenVPN dev setting logic
- Fixed OpenVPN updating from legacy issue that caused IPv6 not to work

## [RUT30X\\_R\\_00.07.02.4](#) | 2022.07.20

- **Improvements:**

- Added default password change warning message before firmware downgrade

- **Fixes:**

- Fixed CVE-2022-2068 vulnerability
- Fixed Hotspot login via landing page issue

## [RUT30X\\_R\\_00.07.02.2](#) | 2022.06.27

- **Improvements:**

- Updated FSTools package to version 2022-05-03
- Added security headers to web requests

- **Fixes:**

- Fixed CVE-2019-12900 libbz2 vulnerability
- Fixed CVE-2022-23303 hostapd vulnerability
- Fixed CVE-2022-29581 Linux kernel vulnerability
- Fixed CVE-2022-29458 ncurses vulnerability

- Fixed CVE-2022-1292 c\_rehash script command injection vulnerability
- Fixed race condition for wireless configuration initialization

## [RUT30X\\_R\\_00.07.02.1](#) | 2022.06.06

- Fixes:
  - Fixed IGMP Proxy menu item not appearing after package installation
  - Fixed MODBUS write requests

## [RUT30X\\_R\\_00.07.02](#) | 2022.05.23

- **New features**
  - Overview side widget
  - IGMP Proxy
  - Privileged Access Management (PAM)
  - AWS Greengrass support
  - HTTPS certificate and key upload feature
  - SSH public keys edit box
  - License page
  - DNP3 data for Data to Server
- **Improvements**
  - Updated busybox to version: 1.34.1
  - Updated curl to version 7.79.1
  - Added iptables filter package for string filtering
  - Added CHAP authentication for L2TP VPN
  - Added IPv6 support for L2TPv3 VPN
  - Added EAP-MSCHAPV2 authentication method for IPsec VPN
  - Added IPv6 support to Auto Reboot
  - Added 'Save to flash' and 'Test configuration' button to DNP3 configuration page
  - Updated SNMP version 5.9.1
  - Added OpenSSL authentication options to SNMPv3
  - Added support for OSPF redistribution options and OSPF neighbors
  - Added password field to BGP Peers page
  - Extended BGP "AS" field validation to accept integers up to 4294967295
  - Added "DHE+RSA" to OpenVPN cipher selections
  - Increased OpenVPN max password length from 128 bytes to 512 bytes
  - Made HMAC key direction initial value dependent on the role of the instance (client or server)
  - Made HMAC key and HMAC authentication key upload fields required
  - Added DES to IPsec encryption algorithms selections
  - Added special character support for CHAP secrets
  - Added validation requirements for PPTP user list username field
  - Added option to manually enter Public key in Wireguard configuration
  - Made generating Wireguard keys possible only while in auto mode
  - Added Events Log database to troubleshoot archive
  - Added RFC1918 filter field
  - Added the possibility to unblock multiple blocked devices at once
  - Added 'Port' column to blocked login attempts table
  - Added Speedtest server refresh
  - Updated Speedtest server list
  - Added asterisk option to Site Blocking

- Added MD5 and SHA256 checksums to package validation page
- Changed certificate requirements to only require client key file if client certificate is used
- Added pagination and data retention between table pages
- Added pagination functionality to tables when there are more than 10 records
- Improved table sorting by saving user provided sort settings in the browser
- Improved drag and drop functionality
- Added the possibility to drag and drop files onto upload components
- Moved 'Root CA' from the 'Access Control' page to the 'Certificates' page
- Added 'Strict-Transport-Security' response header for HTTPS
- Added 'breadcrumbs' to modal windows
- Improved initial WebUI loading after login
- Added error code 5 for reserved SAMBA user names
- Added Mobile data and SMS limit features for external modem
- Added I/O SNMP trap
- Added ISO 8601 time format to I/O Juggler's '%ts' parameter
- Added device name parameter '%pc' to I/O Juggler
- Added PPPoE VLAN priority support
- Made VRRP ping section dependent on main instance
- Added 'WAN to LAN' switch

#### • Fixes

- Fixed CVE-2021-20322, CVE-2021-4197, CVE-2022-1011, CVE-2022-0847 kernel vulnerabilities
- Fixed CVE-2022-28391 busybox vulnerability
- Fixed CVE-2018-16789 shellinabox vulnerability
- Fixed CVE-2021-44543, CVE-2021-44542 privoxy vulnerabilities
- Fixed CVE-2021-43618 GNU Multiple Precision Arithmetic Library vulnerability
- Fixed zlib backport security issue
- Fixed Wireguard firewall zone assignment
- Fixed queued packages disappearing from list after FW upgrade with keep settings
- Fixed error message display for multiple input validation rules
- Fixed incorrect DHCP validation range for start and limit fields
- Removed 'Bring up on boot' option from network interface configuration pages
- Fixed coma-separated DHCP options disappearing after save
- Fixed exclude and listen interfaces
- Fixed 'Use broadcast flag' option saving
- Fixed firewall zone assignment when creating new interfaces
- Fixed OpenVPN 'Netmask' and 'IP address' field validations
- Fixed OpenVPN TAP configuration saving issue\*\* Added multiwan support for Wireguard default route
- Fixed OpenVPN switching to TUN mode when uploading a configuration from file
- Fixed dynamic BGP route state display
- Fixed BGP peer enable in edit page
- Fixed issue when no L2TP client instance could be bound to IPsec
- Fixed firewall rule and zone behavior related to config section creation
- Added default value for L2TPv3 netmask, which is now written to config after save
- Fixed passthrough option saving to IPsec file
- Fixed DMVPN issue where instance configuration could not be saved
- Fixed Wireguard peer could not be saved issue
- Fixed NTP client time synchronization after factory reset

- Fixed device time display with selected time zone
- Fixed MODBUS TCP indexation missing bracket issue
- Fixed initial MODBUS TCP request count validation
- Fixed PIN 3/4 direction switching over MODBUS TCP
- Fixed MODBUS data to MQTT socket closing issue when connection fails
- Fixed MODBUS alarm configuration deletion
- Fixed DNP3 master not working after FW upgrade with 'keep settings'
- Fixed DNP outstation not returning error messages
- Added missing SNMP objects: mobile IP, data sent/received today
- Fixed MQTT Publisher 'Remote address' field validation
- Fixed long interface name support for Azure IoT Hub
- Increased maximum Azure IoT Hub 'Connection String' length to 4096 characters
- Fixed missing sent/received data issue
- Fixed URL input field length validation
- Fixed admin login issue after upload of backup from a device with older firmware versions
- Fixed MAC address formatting in Events reporting messages
- Fixed Events reporting DHCP lease message spam, when no new lease is added
- Fixed logging crashing after downloading Troubleshoot file
- Made Wake on LAN visible only on devices with Ethernet ports
- Fixed Traffic log file transfer to FTP server
- Fixed Web Filter service reloading after a host list file is uploaded
- Fixed access denied messages when sending JSON-RPC requests from root user
- Fixed error message display about duplicated intervals in Profile scheduler
- Fixed FW upgrade with 'keep settings' migration issue for Access Control's 'Fail count' and 'Device port' fields
- Corrected OSPF Routing card values, value positions and names
- Fixed global secret instances not being removed when there are no IPsec instances
- Fixed uploaded file remove icon not staying in position on hover
- Fixed Overview card collapse issue that made it unresponsive after too many clicks
- Removed WAN6 interface from the Overview page
- Fixed Cumulocity connection issue
- Hidden phone groups menu
- Fixed I/O Juggler external modem recognition
- Fixed flash driver reformatting after memory shrink
- Fixed DLNA package installation issue
- Changed Media Directories field to be required
- Fixed SAMBA fields value display
- Fixed relay output value display in I/O Juggler condition page
- Fixed I/O Juggler's WiFi rule not enabling or disabling WiFi interfaces
- Fixed I/O Juggler's double delete issue on I/O Juggler action and condition instances
- Fixed I/O Juggler's incorrect I/O status messages
- Fixed Wake On LAN issue

## **RUT30X\_R\_00.07.01.4 | 2022.02.25**

### **• Fixes**

- Fixed OpenVPN server configuration with password authentication
- Fixed NTP interval length validation
- Fixed network interface enable after Drag & Drop
- Updated NTP client interval to 24h

## [RUT30X\\_R\\_00.07.01.3](#) | 2022.02.15

- **Improvements**
  - DFOTA modem upgrade system for Quectel modems
- **Fixes**
  - Fixed IPSec crashing issue using mobile
  - Fixed FW flashing when chip is in unknown state
  - Fixed CPU usage percentage display in the Overview page
  - Fixed FOTA timeout issue when server does not respond
  - Fixed installation of backup packages

## [RUT30X\\_R\\_00.07.01.2](#) | 2022.01.04

- **Improvements**
  - DFOTA modem upgrade system for Quectel modems
- **Fixes**
  - Fixed IPSec crashing issue using mobile
  - Fixed FW flashing when chip is in unknown state
  - Fixed CPU usage percentage display in the Overview page
  - Fixed FOTA timeout issue when server does not respond
  - Fixed installation of backup packages

## [RUT30X\\_R\\_00.07.01](#) | 2021.11.18

**Note:** Firmware version RUT30X\_R\_00.07.01 released on 2021.11.18 was removed due to an issue with IPsec tunnel while using mobile connection.

- 
- **New features**
    - Load Balancing Rules
    - Tinc VPN
    - German language support
  - **Improvements**
    - Improved WebUI functionality when multiple browser tabs are open
    - Updated base to OpenWrt version 21.02
    - Updated kernel to version 5.4.141
    - Updated mtd-utils to version 2.1.2
    - Updated busybox to version 1.33.1
    - Updated ubus to version 2021-06-3
    - Updated ubox to version 2020-10-25
    - Updated rpcd to version 2021-03-11
    - Updated opkg to version 2021-06-13
    - Updated fstools to version 2021-01-04
    - Updated wwan to version 2019-04-29
    - Updated ethtool to version 5.10
    - Updated uhttpd to version 2021-03-21
    - Updated ppp to version 2020-10-03
    - Updated odhcpd to version 2021-07-18
    - Updated hostapd to version 2020-06-08



- Updated dropbear to version 2020.81
- Updated dnsmasq to version 2.85
- Updated netifd to version 2021-07-26
- Updated firewall3 to version 2021-03-23
- Updated libjson-c to version 0.15
- Updated libevent2 to version 2.1.12
- Updated mac80211 to version 5.10.42-1
- Updated wireless-regdb to version 2021.04.21
- Updated binutils to version 2.35.1
- Updated gdb to version 10.1
- Updated strace to version 5.10
- Updated trace-cmd to version 2.9.1
- Updated valgrind to version 3.16.1
- Updated ath10k-ct-firmware to version 2020-11-08
- Updated procd to version 2021-02-23
- Updated iw to version 5.9.8
- Updated iproute2 to version 5.11.0
- Updated iptables to version 1.8.7
- Updated nettle to version 3.6
- Updated libpcap to version 1.9.1 rel3
- Updated elfutils to version 0.180
- Updated cryptodev-linux to version 1.11
- Updated linux-firmware to version 20210118
- Updated util-linux to version 2.36.1
- Updated openwrt-keyring to version 2021-02-20
- Updated mtd to version rel26
- Updated fwtool to version 2019-11-12
- Updated ca-certificates to version 20210119
- Updated wireguard-tools to version 1.0.20210223
- Updated iwinfo to version 2021-04-30
- Updated ipset to version 7.6
- Updated gre to version rel12
- Updated wolfssl to version 4.7.0
- Updated ustream-ssl to version 2020-12-10
- Updated uclient to version 2021-05-14
- Updated readline to version 8.1
- Updated mbedtls to version 2.16.11
- Updated libusb to version 1.0.24
- Updated libunwind to version 1.5.0
- Updated libubox to version 2021-05-16
- Updated libnl-tiny to version 2020-08-05
- Updated libnftnl to version 1.1.8
- Updated libiconf-full to version 1.16
- Updated libbsd to version 0.10.0
- Updated gmp to version 6.2.1
- Updated ulogd to version rel6
- Updated sqm-scripts to version 1.5.0
- Updated ntpclient to version rel14
- Updated nmap to version 7.80
- Updated curl to version 7.77.0
- Updated zerotier to version 1.6.5

- Updated xtables-addons to version 3.13
- Updated xl2tpd to version 1.3.16
- Updated stunnel to version 5.59
- Updated strongswan to version 1.0.13
- Updated sstp-client to version 1.0.13
- Updated pptpd to version rel5
- Updated openvpn to version 2.5.3 rel2
- Updated ntpd to version rel3
- Updated net-snmp to version rel2
- Updated mosquito to version 2.0.11
- Updated miniupnpd to version 2.2.1 rel 3
- Updated etherwake to version rel5
- Updated libzip to version 1.7.3
- Updated libgpg-error to version 1.39
- Updated glib2 to version 2.66.4
- Updated libnetfilter-conntrack to version 1.0.8
- Updated libnetfilter-log to version rel3
- Updated lzo to version rel4
- Updated nghttp2 to version 1.43.0
- Updated openvpn-easy-rsa to version 3.0.8 rel3
- Updated iperf to version rel2
- Updated iperf3 to version 3.10.1
- Updated e2fsprogs to version 1.45.6
- Updated fuse to version 2.9.9
- Updated udprelay to version 2020-02-26
- Updated qmicli to version 1.28.2
- Updated pcre to version 8.45
- Updated libsmpp34 to version 1.14.1
- Updated libiwininfo to version 2.1
- Added netifd library for additional information related to network interfaces
- Updated openssl to version 1.1.1l
- Updated privoxy to version 3.0.32
- Added ACL reload method for sessions
- Added 'Advertisement interval' field to the VRRP configuration window
- Added a PPTP-to-WAN Zone Forwarding rule when default route is enabled on PPTP client
- Added email user group validation for sending test emails with Events reporting
- Added an event logging feature for Ping Reboot events
- Improved file/section deletion logic: now files are also deleted after deleting a related config section
- Improved package deletion logic
- Added the possibility to configure multiple reboot times in one Reboot Scheduler configuration instance
- Updated 'External system log server' field validation to accept IPv6 addresses
- Added redirect to Overview page after login
- Added WebUI session timeout after user inactivity
- Added placeholder text to dropdown menus
- Improved multi-select design and functionality
- Added Unix timestamp, local ISO time, UTC time to Modbus
- Added info message when selected file cannot be uploaded
- Improved IPsec throughput

- Added IPsec "Compatibility mode" configuration support
- Made SNMP 'Community name' option editable
- Added new configuration options to the Failover feature
- Changed Failover page availability from Advanced only both advanced and basic
- Made Failover Interfaces table rows draggable when in 'Load Balancing' mode
- Changed Failover page 'Ratio' fields to a smaller size
- Added external modem support for the 'Mobile Usage' graph
- Added I/O support to SNMP
- Removed ubus list method due to security reasons
- Added MODBUS "%I, %T, %S, %r, %n" support to MODBUS Data Sender
- Removed search engine site crawling
- Improved IPsec "Local/Remote source" validation
- Added Firewall "all" and "custom" protocol options
- Added Backup file size limit of 2 MB
- Improved basic/advanced mode changing
- Improved Wireguard "IP Addresses" field validation
- Added language download support from language selection section
- Added PPTP "Client to client" configuration support
- Made DDNS "username", "password", "host" fields optional
- Added SSTP "Default route" configuration support
- Added I/O action support MODBUS Alarms
- Added "Topology state" support to Events Reporting

#### • Fixes

- Made RMS 'Connect' button disabled when a connection attempt is already in progress
- Added validation for TLS Clients 'Private network' option
- Fixed the validation range for MTU fields
- Fixed removing firmware image file after leaving the firmware upgrade page
- Fixed network selection list for Traffic Logging - added all available LAN networks
- Fixed DHCP Options validation
- Fixed configuration profile date display
- Fixed blank page after invalid URL in login page
- Fixed TR-069 related firewall rule loading
- Fixed remote subnet netmask validation issues for the GRE Tunnel configuration
- Fixed WebUI section toggle
- Fixed package installation modal layout
- Fixed current page values showing up in login page username field
- Fixed the possibility to create section with a name that is already in use in the same config file
- Fixed OpenVPN username and password deletion when deleting configuration instance
- Fixed session closing issue for the user whose password was just changed
- Updated MODBUS credential validation
- Updated MQTT credential validation
- Fixed DNS 'Rebind protection' setting when switch is disabled
- Updated libgcrypt to version 1.9.3 to fix CVE-2021-33560
- Fixed CVE-2021-33624, CVE-2021-29648 vulnerabilities
- Fixed DHCP 'Lease time' and 'Unit' option saving over the Setup Wizard LAN page
- Fixed Reboot Scheduler not removing crontab file after disabling the rule
- Fixed OpenVPN 'Extra options' field validation to allow a space character
- Added table drag and drop functionality to the Firewall's Traffic Rules page
- Fixed DNP3 Outstation crash caused by non-void function returning no value

- Fixed RMS 'Copy' button functionality
- Fixed incorrect loading after saving Failover configuration
- Fixed I/O Juggler hour condition interval issue
- Patched CVE-2021-40528 vulnerability
- Patched CVE-2021-40490 vulnerability
- Patched CVE-2020-16120 vulnerability
- Fixed VLAN section creation
- Returned Interfaces "Port priority" option
- Fixed missing Content-Type header to initial WebUI response
- Fixed RIP information parsing in status page
- Fixed OpenVPN IPv6 netmask validation
- Fixed SNMP Trap Settings Host/IP field validation
- Fixed Cumulocity authentication reset
- Fixed Events Reporting rule saving

## **RUT30X\_R\_00.07.00 | 2021.07.16**

### **• New features**

- New WebUI based on Vue.js 2.6.12
- RutOS updated to OpenWrt 19.07.7 base
- DNP3 Master and DNP3 Oustation

### **• Improvements**

- Updated firewall to release 3
- Updated kernel to version 4.14.221
- Updated uhttpd to version 2020-10-01
- Updated xtables-addons to release 9
- Updated mwan to version 2.8.14
- Updated pcre to version 8.44
- Updated curl to version 7.74
- Updated sqlite to version 3.33
- Updated ncurses to version 6.2
- Updated OpenSSL to version 1.1.1k
- Added full MODBUS register address expansion specifier for Data to Server
- Added full MODBUS register address legend
- Added Client ID option for the MQTT protocol in Data to Server
- Improved Data to Server sleeping accuracy
- Improved Data to Server username validation; now space is allowed
- Added firmware version OID to the SNMP service
- Added IP address family option field to the SNMP page
- Added SNMPv6 section to the SNMP Communities page
- Renamed the 'System -> Users' page to 'System -> System Users'
- Moved password changing option to the 'System -> System Users' page
- Switched to ar8216 driver
- Added IPsec XAUTH support
- Improved OpenVPN updown, init scripts to write info about instance in JSON
- Added AES-256-GCM encryption support to OpenVPN
- Added extra configuration parameters to DMVPN
- Added PSK conversion to DMVPN and single PSK types
- Improved Package Manager package installation, deletion and dependencies
- Improved Package Manager download process over FOTA
- Added new Input/Output values manageable over RMS

- Added IPv6 traffic logging
- Made 'Network -> Failover' and 'Network -> Interfaces' page data draggable on multiple browsers
- Added Input/Output Post/Get URL parameter t\_time changing delay and time to seconds or milliseconds
- Added support for multiple USB to Serial adapters
- Added peer groups to BGP access list dropdown
- Added TCP MD5 authentication support for BGP
- **Fixes**
  - Added glib2 patch to fix CVE-2019-13012 vulnerability
  - Added ntfs-3g patch to fix CVE-2019-9755 vulnerability
  - Added WolfSSL patch to fix CVE-2021-3336 vulnerability
  - Added Busybox patch to fix CVE-2018-1000500 vulnerability
  - Added netifd, odhcp6c IPv6 routing loop on point-to-point links patches to fix CVE-2021-22161 vulnerability
  - Fixed Android clients IPsec MTU/MSS size
  - Fixed wrong IPsec DPD value saving
  - Changed IPsec PSK maximum length to 128 symbols
  - Fixed SSTP remaining up after package removal
  - Fixed DMVPN crypto\_proposal write to config
  - Fixed I/O Juggler's SMS sending to correct group
  - Fixed I/O Scheduler's relay state issue
  - Added I/O direction check while changing IOs via I/O Post/Get
  - Fixed float endianness mismatch on some devices MODBUS TCP Master, MODBUS Serial Master
  - Fixed UPnP issue that caused config changes to apply only after service restart
  - Fixed WebUI files caching when upgrading firmware
  - Fixed WebUI date display format
  - Fixed MODBUS returning incomplete MAC address data
  - Fixed 'Over IP' serial type's UDP issue in client mode
  - Fixed DLNA connections count total in statistics page

## [RUT30X\\_R\\_00.02.06.1](#) | 2021.02.10

- **Fixes**
  - Added dnsmasq patch CVE-2020-25681, CVE-2020-25682, CVE-2020-25683, CVE-2020-25684, CVE-2020-25685, CVE-2020-25686, CVE-2020-25687
  - Fixed PPTP server interface naming
  - Fixed correct client PPTP interface name selection for route creation
  - Fixed adding helper to firewall's wan zone when enabling PPTP configuration
  - Added package size checking when manually installing a package
  - Fixed 'New Firmware Available' message display after firmware upgrade

## [RUT30X\\_R\\_00.02.06](#) | 2020.12.31

- **New features**
  - Initial RUT300 Firmware