

RUTX50 Firmware Downloads

[Main Page](#) > [RUTX Routers](#) > [RUTX50](#) > **RUTX50 Firmware Downloads**

This page contains firmware files for RUTX50 devices. Look to the table below or the [changelog](#) to find download links.

To upgrade firmware using WebUI, follow the instructions in [RUTX50 Firmware](#).

| RUTX50 | | | | | | |
|---|--------------------|--------------|---------|----------------------------------|----------------------|--|
| File | Type | Release date | Size | MD5 | Changelog | |
| RUTX_R_00.07.06.10_WEBUI.bin | Latest FW | 2024.04.04 | 24.6 MB | 6ade4748118720d9f8c72524498acf69 | Link | |
| RUTX_R_00.07.06.10_WEBUI.bin | Mass production FW | 2024.04.04 | 24.6 MB | 6ade4748118720d9f8c72524498acf69 | Link | |
| RUTX_R_GPL_00.07.06.10.tar.gz | SDK | 2024.04.04 | 80.1 MB | a6653437efdbba12151579615a86b2f3 | | |

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

Global RUTOS changelog can be found here: [LINK](#)

* This is universal changelog of RUTOS. Changes made to features that are not present in some devices, do not affect them.

[RUTX_R_00.07.06.10](#) | 2024.04.04

- Global changelog for **R_00.07.06.10** - [LINK](#)

[RUTX_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.

[RUTX_R_00.07.06.6](#) | 2024.03.04

- Global changelog for **R_00.07.06.6** - [LINK](#)

[RUTX_R_00.07.06.5](#) | 2024.02.21

- Global changelog for **R_00.07.06.5** - [LINK](#)

[RUTX_R_00.07.06.3](#) | 2024.01.17

- Global changelog for **R_00.07.06.3** - [LINK](#)

[RUTX_R_00.07.06.1](#) | 2024.01.04

- **Fix**
 - **Services**
 - Fixed issue with NTPclient zombie processes
 - **WebUI**
 - Fixed issues with VoLTE status and 5G network type display

[RUTX_R_00.07.06](#) | 2023.12.20

- **New**
 - **Network**
 - Enabled IPv6 by default for mobile interfaces
 - Added operator blacklisting and whitelisting based on mobile country code
 - Added SIM card not inserted event in Events Log
 - Added 802.11v BSS Transition Management and 802.11k Radio Resource Measurement
 - **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 new Post/Get service action "mobile_sim_pin" for changing used SIM PIN code on the device
 - Added TLS support for OverIP serial functionality
 - **WebUI**
 - Added Tailscale VPN support
 - Renewed user interface design
 - Added network interface name change functionality
 - Added last resort configuration option for multiwan policy rules
 - Added indication when new modem firmware is available

- Added mobile connection establishment display in mobile status page
 - Added default value for "Reset threshold" field in Low Signal Reconnect feature
 - **System**
 - Added ability to enable/disable SSH access for specific users in System Users
 - API support
- **Improvements**
 - **Network**
 - Disabled operator scan when SIM card is not inserted
 - Added two radio support on one SSID in Wireless
 - **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 possibility to assign mobile interface in SQM service
 - Added reboot on storage device disappearance and re-appearance
 - Added additional anonymous phone number validation in Mobile Utilities service
 - Added "N/A" signal strength response in DNP3 service if SIM card is not inserted
 - **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
 - Added indication in Overview, Status -> Mobile and WAN pages when mobile data limit is reached
 - Updated Operator state field to show if modem is in limited service
 - Combined Mobile Usage day, week, month and total pages into one
 - Updated Realtime data -> Mobile signal page design to show all available modems and their bands data in one graph
 - Added message when SIM card requires PIN/PUK code in Status -> Mobile page
 - Moved WiFi scanner page to Services section
 - **System**
 - Added Mosquitto CVE patch 2023-28366
 - Added Mosquitto CVE patch 2023-3592
 - Updated hostapd version to 2023-09-08
 - Updated cURL version to 8.4.0
 - Updated kernel version to 5.10.199
 - Updated Mac80211 version to 6.1.24
 - 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 RUTX VLAN keep settings issue when WAN port configuration are overwritten with 1st vlan
- Fixed Failover missing active rules when using multiple source and destination IP addresses
- Fixed mobile service crash due to buffer overflow while reading partially overwritten SMS
- Fixed an issue with Manual APN connection making attempts too rapidly
- Fixed deny data roaming functionality when transitioning between roaming and home operator network
- Fixed network disconnection on mobile network detach and DHCP lease loss situations
- Fixed VoLTE configuration after modem reboot
- Fixed Mobile interface bridge and passthrough mode connectivity loss
- Fixed an issue where rarely PIN code would get removed after SIM switch
- Fixed mobile operator list being not updated after changes in WebUI
- Fixed issue where mobile interface was unreachable after device reboot or interface restart while using Failover service
- Fixed unstable Wireless mesh connection
- Fixed low Wireless mesh throughput
- Fixed concurrent Wireless STA and AP functionality on 5 GHz band

- **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 Cumulocity app not sending any telemetry data
- Fixed Call Utilities failure when caller id is hidden during a call
- Fixed AVL with poor mobile connections
- Fixed default profile SMS Utilities I/O status rule configuration in Profiles functionality
- 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
- Fixed mobile cell ID retrieval in TR-069 service

- **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 RelayD configuration issues after keep settings
- Fixed realtime graphs responsive design issues
- Fixed Network Shares users deletion
- Fixed not all LAN interfaces shown in dropdown in Hotspot service page
- Fixed modem updater legacy firmware flashing
- Fixed wireless realtime data to show signal as unavailable with no connected clients
- Fixed WiFi scanner disconnecting AP users
- Fixed setup wizard errors in Wireless configuration 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
 - Fixed WebUI access after upgrading from legacy RutOS version

[RUTX_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

[RUTX_R_00.07.05.3](#) | 2023.10.30

- **New**
 - **System**
 - Added support for GD5F2GM7 and GD5F2GQ5 GigaDevice NAND flashes
- **Fix**
 - **Network**
 - Improved device stability when using IPv6 for modem connections

[RUTX_R_00.07.05](#) | 2023.10.19

- **New**
 - **Network**
 - Added "shared.m2m.ch" APN for Swisscom IoT operator to APN database

- Added "gamma" APN to auto-APN database
- Added "soracom.io" APN for Soracom operator to APN database
- Added "simbase" APN to auto-APN database
- Added "pnd" APN for Pond IoT to auto-APN database
- Added "spitfire1" APN for Spitfire operator to APN database
- New argument in "gsmctl" CLI command for Carrier aggregation
- Numeric mode support for modem AT commands
- Enabled dynamic MTU configuration on mobile interfaces by default
- WDS support for wireless bridging
- **Services**
 - DLMS Client package
 - 7zip package
 - TincVPN package
 - Added router uptime and mobile connection uptime data parameters 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
 - Added DPO configuration support in GPS
 - Added more mobile usage parameters to SNMP
 - SIM Idle Protection package
 - AVL collection based on minimum accuracy for GPS service
- **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
 - IP6 table configuration option for DHCPv6 protocol in Network -> WAN page
 - Wireless interface QR code generator
 - Channel analysis page Status -> Wireless -> Channel Analysis
 - Disabled direct network interface deletion when it is associated with a wireless interface
 - Limited to a single section configuration and added IP address field for Relayd service
 - "Fast roaming" configuration for Wireless service in Client mode
 - Updated Status->Network->Wireless page to display interfaces as cards and added ability to filter connected clients by selected interface
 - "Write to config" option for SIM Switch action in I/O Juggler service
 - Configurable GPS NMEA prefix

- Modem Debug page
- APN database management page added to package manager
- Added "Message forwarding" option in SMS Rules page when rule type is "Execute custom script"
- Ability to unblock SIM card and insert SIM PIN in Overview page
- New SMS rules "Reset mobile connection" and "Reload config"
- "SMS limit clear due" display in Overview page
- Added modem temperature to System -> Status 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
 - Improved IPsec performance throughput
 - Improved auto APN selection
 - SMS sending event is now logged into events log
 - Improved roaming control
 - Removed unused APN usernames and passwords from auto-APN database
 - Added connection to the operator when no mobile interfaces are active
 - Improved VoLTE management functions
 - Improved cases where Low Signal Reconnect sometimes executed prematurely
 - Improved wrong SIM PIN remove logic
 - Added automatic reconfiguration when switching between wireless interface modes
 - Added automatically generated name option for new network
 - **Services**
 - 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
 - A single SMS message with multiple PDUs is sent instead of multiple SMS messages in Email to SMS service

- Allowed connection to SMPP server using IPv6 address
- Extended IP unblock action functionality in SMS Utilities
- Increased allowed Email to SMS service message size to 61440 bytes
- Added parameter "%gs" that sends GPS data in formatted info message
- Updated AVL to prefer checking network status through Failover if configured
- 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
 - Updated Status -> Network -> Mobile page layout
 - Added bandwidth, provider in Status -> Network -> Mobile page
 - Added colors for signal strength values in Status -> Network -> Mobile page
 - Added frequency, pcid, mcc, mnc and LAC values in Status->Network->Mobile page
 - Refactored network type selection in Network -> Mobile -> General page
 - Serving cell information is not returned anymore when SIM card is not inserted

- Changed default "Check interval" option value in Network -> Mobile -> SIM Switch page
- Added button in a Scanned operators table which allows to add an operator to the operator list
- Added search bar in Mobile Utilities -> SMS Utilities page
- Added SMS sent and limit count to Network -> Mobile -> General page
- Added GPS longitude and latitude data in TR069
- Updated Mobile Signal graphs to show EC/IO and RSCP values when network type is 3G
- Updated Mobile Signal graphs to show RSRP, RSRQ and SINR values when network type is 5G
- Added DFS channel marking in Network -> Wireless
- Show wireless MAC address even when interface is inactive in Status -> System page
- Merged Multi AP configuration to wireless interface edit modal
- Added automatic network switch to bridge if selected in Wireless configuration
- Added default encryption for newly created wireless interfaces
- Simplified "802.11r Fast Transition" configuration options in Wireless interface configuration
- Updated "Change SIM" action type to display configured SIM target in I/O Juggler -> Actions overview page
- **System**
 - Updated kernel version to 5.10.188
 - 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 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
 - Fixed SMS limit period migration
 - Fixed SMS limit size breaking various functionality
 - Fixed custom IPv6 DNS option not overriding default DNS from operator
 - Fixed an issue with blacklist and whitelist connection
 - Fixed multipart SMS handling

- Fixed wrong SIM state display when SIM is fully blocked
- Fixed incorrect virginmobile APN MNC
- Fixed mobile operator scanning fault when no mobile interfaces are active
- Fixed mobile interfaces generating multiple events on mobile connection
- Fixed device selecting 4G/5G service mode when 3G and manual operator configured
- Fixed PDU SMS parsing when operator provides user data header in single part SMS
- Added scheduled data limit clear for inactive mobile interfaces
- Fixed Wireless AP and STA functionality for 5GHz band
- Fixed Wireless scanning issue with certain configuration
- Fixed Wireless transmit power changing without user input after saving different country code
- Fixed clients isolation functionality in Wireless
- Fixed Wireless STA authentication failure in case of channel change
- Fixed Multi AP startup when changing Multi AP configuration in Wireless
- Fixed client connection to EAP Wireless network
- **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 user deletion in Network Shares service
- Fixed router reboot inconsistencies after Storage Memory Expansion
- Fixed received SMS messages parsing with trailing whitespaces
- Fixed VPN status rule message text in SMS Utilities
- Fixed UDP payload size in GPS AVL

◦ **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 incorrect Bluetooth details modal size
 - Updated to display "MAC address" on device details page
 - Fixed disabling DLNA service when USB drive is removed
 - Fixed error when user has no write permissions in Speed Test page
 - Fixed "Clear Collect Data" button logic to not clear overall mobile usage info
 - Fixed "Used data" showing large negative numbers for disabled mobile interfaces with Data Limit enabled
 - Fixed carrier aggregation information when no connection is made or SIM card is not inserted
 - Changed representation of mobile cell ID from hexadecimal to integer type
 - Fixed 5G connection signal strength values display
 - Fixed cell info and signal value parsing for 5G SA connection
 - Fixed Mobile Utilities "SMS forwarding to HTTP" URL generation
 - Fixed an issue where sometimes bands were not represented correctly on certain modems
 - Fixed provider information and IMSI value representation when SIM and modem cannot provide this information
 - Fixed mobile pages throwing 404 error when modem disconnects
 - Fixed WebUI showing mobile connection when no SIM card is inserted
 - Updated Network -> Wireless interface add and delete button visibility in basic mode
 - Fixed Wireless Multi AP incorrect SSID list after removal of an instance
 - Fixed MAC address filtering in Network -> Wireless page to list only connected WiFi devices
 - Fixed GPS AVL I/O trigger option filtering
 - Fixed modem 5G SA connection serving cell information parsing
- **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-2023-3773 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-2023-40283 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

[RUTX_R_00.07.04.5](#) | 2023.07.24

- **Improvements**

- **Network**

- Improved MBN reselection algorithm when switching SIM
 - Improved SIM card change detection algorithm
 - Improved connection establishment speeds after sim switch
 - Added metric field support in BGP Route-maps page

- **WebUI**

- Updated SIM slot labeling in modem card Overview page

- **Fix**

- **Network**

- Fixed an issue with MBN selection when device is started for the first time
 - Fixed an issue where MBN activation would not be successful
 - Fixed service provider parsing when operator does not provide all fields for Quectel modems
 - Fixed a condition where mobile connection would not get established after a SIM switch
 - Fixed an issue with SIM switch causing connection problems
 - Fixed device showing 5G connection when 5G connection is not established or configured
 - Fixed an APN configuration issue

[RUTX_R_00.07.04.4](#) | 2023.06.26

- **New**

- **Network**

- Travelmate package for captive portal redirection

- **Improvements**

- **Network**

- Improved mobile operator query methods and operator name parsing in various services

- **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**

- Fixed a connection issue with bridge/passthrough mode when reconnecting ethernet cable
 - Fixed long mobile operator list parsing for whitelist/blacklist functionality
 - Patched CVE-2023-32233 vulnerability
 - Fixed an issue with Multi AP service remaining enabled when disabling
 - Fixed registration status value bug when performing SIM switch
 - Fixed SIM card slot retrieval when modem is busy
 - Fixed default networks in WAN firewall zone and possibility to add a 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

[RUTX_R_00.07.04.3](#) | 2023.05.11

- **Improvement**

- **System**

- Removed SSH RSA key generation
 - Added SSH ECDSA key generation

- **Fix**

- **Network**

- Fixed an issue with mobile when Call Utilities configuration is invalid
 - Fixed mobile connectivity in bridge mode after firmware upgrade
 - Fixed clients being unable to connect to wireless AP when multi AP configuration is empty
 - Fixed an issue where sometimes PIN/PUK code was deleted when performing a SIM switch

- **Services**

- Fixed incorrect mobile data usage provided to RMS service

- **System**

- Fixed an issue on bootloader web recovery hanging with certain firmware sizes

[RUTX_R_00.07.04.2](#) | 2023.04.18

- **New**

- nftables support

- **Improvement**

- **Network**

- Added PDP profile registry and LTE SMS format functions & management for the Verizon network
 - Improved SIM detection algorithm
 - Improved Multi-APN connection establishment time

- **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 IPv4, IPv6 mobile connection restarts
 - Fixed operator scanning when mobile interface is disabled
 - Fixed data limit and tracking when software flow offloading is enabled
 - Added network reload call before bringing the mobile interface up
 - Fixed a segmentation fault issue which would occur occasionally when switching between SIM cards
 - Fixed Port-based VLAN ID calculation issue
 - Fixed Ethernet interfaces showing incorrect transferred data values
 - Fixed EEE disable issue that caused reduction in data transfer speed
 - Fixed PDP context authentication when using special characters

- **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 wrong timezone returned issue in Operator Station Synchronization & Timezone Synchronization
 - Fixed MODBUS TCP Slave memory leak issue when requesting mobile parameters
 - 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 possible reboot halt issue
 - Fixed frr vulnerability CVE-2022-37035
 - Removed ability for non root users to edit scripts that get executed as root

[RUTX_R_00.07.04.1](#) | 2023.03.24

- **Fix**

- **Network**

- Fixed Data Limit issue

RUTX_R_00.07.04 | 2023.03.07

Note: Firmware version **RUTX_R_00.07.04** was removed from downloads list due to issues with Mobile Data Limit functionality not working correctly when Software offloading is enabled.

- **Improvements**

- **WebUI**

- Improved data persistence between page refreshes
- Improved page navigation behavior
- Improved redirect logic to open configuration edit modals
- Updated the 'Status -> Mobile' page
- Updated interface card in the Overview page
- Separated Sent and Received data bars on the chart in the Mobile Usage page

- **Network**

- Added an info message displayed when a faulty SIM card is inserted
- Added ResIOT operator's APNs to the APN database
- Improved mobile connection re-establishment after reboot
- Improved mobile connection recovery in cases where it was lost unexpectedly
- Improved 'Deny data roaming' operation when switching between operators
- Changed default WiFi AP cipher to CCMP (AES)
- Added the logging of MAC addresses rejected by a WiFi AP

- **Services**

- Fixed the listing of slow USB devices such as HDDs
- Added MQTT support to I/O Juggler
- Added support for new NMEA sentences: GARMC, GAGGA, GAGSA, GAVTG, GBGSV, GBGSA, GQGSV, GQGSA
- Added an error message when trying to send an SMS from the 'Send Messages' page with no SIM card inserted
- Changed the behavior of setting the 'Write to config' flag in the 'mobileoff' SMS rule
- Added argument support for the 'Execute custom script' SMS rule
- 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
- Updated DFOTA notification to show "More info" only when the update is forced

- **Fix**

- **WebUI**

- Fixed mobile status missing RSRP, RSRQ and SINR values on 5G NSA connection type
- Fixed issue when '3G only' SIM card is used
- Fixed MAC address showing on mobile interfaces
- Fixed mobile cell ID displaying in hexadecimal
- Fixed mobile data limit card creation in the Overview page
- Fixed modem widget disappearing from the Overview page
- Fixed Services page not displaying data after Thingworx package is installed
- Added DNP3 to the 'Status > Services' page

- **Network**

- Made Software Flow Offloading Enabled by default
- 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
- Fixed call function when VoLTE is disabled
- Fixed VoLTE control when IMS is not enabled
- Fixed mobile IPv6 IP checking when the device didn't get a correct IP address
- Fixed APN authentication when using empty credentials
- Fixed manual APN selection from list
- Fixed disabled WiFi interface after factory reset
- Fixed WiFi interface creation with SAE mixed encryption

- **Services**

- Fixed disappearing GPS NMEA and HTTPS fields
- Fixed unused NTRIP option deletion on NMEA source change
- 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 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 WiFi Hotspot landing page uploaded theme image display
- Fixed WiFi Hotspot trial user deletion issue
- Fixed WiFi Hotspot service crash when associated WiFi interface is not up
- Fixed WiFi Hotspot password request by SMS
- Fixed WiFi Scanner starting process when the WiFi interface is disabled
- Added limitations on message size and quantity of email messages in Email to SMS
- Fixed SMTP HELLO value parsing issue
- Fixed SMS message window reset button

- Fixed not being able to save empty 'Message text' field in Auto Reply
- Fixed multi-part SMS concatenation
- Fixed multi-part SMS processing
- Fixed SMS error message on 'Mobile Data Reset' action
- 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
- Fixed USB to Serial adapter detection
- Fixed GPS issues
- **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
 - Fixed LED indications when PDP type is IPv6
 - Fixed issues with PDP type and SMS limit period migration via keep settings
 - Fixed mobile network type LED indications when device is in Bridge or Passthrough modes
 - Fixed LAN port LEDs staying on after being disabled

[RUTX_R_00.07.03.4](#) | 2023.02.09

- **Fix**
 - **Network**
 - Fixed CVE-2023-32349 vulnerability
 - Changed generic modem restart method
 - Fixed mobile page VoLTE switching issues
 - **Services**
 - Sanitized tcpdump storage location

[RUTX_R_00.07.03.3](#) | 2023.01.25

- **Fix**
 - **Network**
 - Updated init sequence

[RUTX_R_00.07.03.2](#) | 2023.01.13

- **New**
 - **System**
 - Japanese language
- **Improvements**
 - **Network**
 - Optimized mobile netifd script installation
- **Fix**
 - **Network**
 - Shortened modem hang monitor timeout
 - Fixed VLAN option setting when changing VLAN ID

[RUTX_R_00.07.03.1](#) | 2023.01.03

- **Improvements**
 - **System**
 - Remove front-end certificate validation
 - **Network**
 - Improved 5G connection evaluation
 - Optimized mobile netifd script installation
- **Fix**
 - **Network**
 - Fixed modem communication validation
 - Fixed connection establishment in IPv6 only mode
 - **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
 - Fixed operator index in DNP3 outstation; added GPS resubscribe; fixed segfault when GPS is enabled
 - **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

[RUTX_R_00.07.03](#) | 2022.12.16

- **New**

- **Network**
 - Firewall DMZ page
- **Services**
 - Java package
 - SFTP server support
 - OPC UA client
 - NTRIP
 - Hotspot registered users management 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 option to select subnet parameters in mobile Passthrough/Bridge modes
 - Added WhereverSIM operator APN and fr.lebara.mobi APN to APN database
 - Added mobile connection state for IPv6
 - Added switch back to default SIM after SIM Switch service disable
 - Added wget tracking method to WAN Failover
 - Added interface checks to remove inaccurate Failover events from the Event Log
- **Services**
 - Added OpenVPN IPv6 Web support
 - 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
 - Added CSP headers to Hotspot Landing Page
 - Added hotspot user script validation

- Improved logging of disconnecting client devices
 - Added the possibility to switch profiles on GPS geofencing events
 - Added satellite count and accuracy columns to GPS Map page
 - Added execute custom script SMS Utilities rule
 - Added receiver and transceiver mode support to SMPP
 - Added timezone synchronization with GSM operator option to NTP Client
 - 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
 - Added internal error handling subsystem for I/O Manager
- **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 an indication to the Interfaces page that displays when data limit is enabled
 - 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 mdcollect memory leak issue
 - Fixed data limit not resetting properly
 - Fixed incorrect mobile data usage calculations for multiple day periods
 - Fixed an Auto APN 'Keep settings' issue
 - Fixed data counting after mobile data limit has been reached
 - Fixed mobile band not setting correctly on first try
 - Fixed incorrect data limit conditions causing unwanted SIM switches
 - Fixed Passthrough DHCP lease time setting
 - Fixed mobile bridge mode issue when no DNS servers are supplied
 - Added new Operator Lists instance name validations
 - Added individual WiFi toggle support
 - Added error message when DFS channel is selected during scanning
 - Fixed mac80211 vulnerabilities CVE-2022-41674, CVE-2022-42719, CVE-2022-42720, CVE-2022-42721, CVE-2022-42722
 - Fixed wireless interfaces connections not reestablishing after disabling & enabling again
 - Updated DFS radar detection patterns for Japan
 - Fixed 5G connection state checking
 - Fixed LED operation when device is connected to 5G
 - Fixed SIM Switch issue on newly created mobile interfaces
 - Fixed switch back to primary SIM rule disable when the default SIM is changed
 - Fixed incorrect SIM Switch behavior on low signal value
 - 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
 - Fixed I/O Juggler SMS text message Save & Apply issue

- Fixed Hotspot connected user list maximum upload/download value limits
- Fixed incorrect connected Hotspot user information in RMS JSON
- Fixed Delay field in GPS HTTPS/HTTP Server Settings section
- Fixed AVL packet timestamp display
- Fixed issue that prevented GPS map display after clearing cache
- Removed unnecessary field from the Port Mirroring page
- Fixed Events Reporting 'Changing to SIM1/SIM2' options
- Fixed Hotspot issues related to specific connected phones
- Fixed Wireless AP enabled by MODBUS TCP Master not showing in Wireless clients
- Fixed WiFi Scanner hostname validation issues
- Implemented Hotspot 'forget' method, which removes user from DB by MAC
- Fixed UCI SMS Rule return message to display new changes
- Fixed DNP3 issues when asking for modem temperature
- Fixed base64 encoding of SMS messages when forwarding to HTTP
- Fixed SMS sending issues when using multiple APN
- Added Gateway modem option to IP Block and WoL in SMS Rule edit
- Fixed unblocking IP addresses with an SMS message
- Fixed Mobile Utilities page not load properly on some occasions
- 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 a 'Keep settings' issue
 - Fixed LED operation while device is in bootloader state
 - 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 Hotspot interface display
 - 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

[RUTX_R_00.07.02.8](#) | 2022.09.16

- **New features**
 - Initial firmware release