

# TRB500 Firmware Downloads

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This page contains firmware files for TRB500 devices. Look to the table below or the [changelog](#) to find download links.

To upgrade firmware using WebUI, follow the instructions in [TRB500 Firmware](#).

File	Type	Release date	Size	MD5	Changelog
<a href="#">TRB500_R_00.07.07.1_WEBUI.bin</a>	Latest FW	2024.05.03	20.74 MB	c8620761ea5905e6e4d7890e2073bc6d	<a href="#">Link</a>
<a href="#">TRB500_R_00.07.06.10_WEBUI.bin</a>	Mass production FW	2024.04.04	20.49 MB	f2702f322650864254e214bd24f53da1	<a href="#">Link</a>
<a href="#">TRB500_R_GPL_00.07.07.1.tar.gz</a>	SDK	2024.05.03	396.85 MB	478953f01621038a27b018cdf4a75f6d	

**Note:** Firmware versions before TRB5\_R\_00.07.04.4 will not be supported by devices from batch 09 and higher.

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

## FW checksums

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

## Changelog

### [TRB500\\_R\\_00.07.07.1](#) | 2024.05.03

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- **Improvements**
  - **Network**
    - Mobile: improved connection establish time for uqmi protocol
  - **System**
    - WebUI: improved first login password change logic
    - Certificates: updated Root CA certificates
- **Fix**
  - **Network**
    - Mobile: fixed denied roaming flag set
- **CVE Patches**
  - CVE-2024-2397

- **New**

- **Network**

- WebUI: added ESM/EMM message notifications
- 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
- Auto APN: added “uno.au-net.ne.jp” APN for “KDDI” operator
- Auto APN: added 'eprivate010.tisparkle.com' APN for “Sparkle” operator
- Mobile: added framed routing support
- 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
- TR-069: added PCI, LAC, TAC, EARFCN and Neighbour cells data to Device.MobileInfo node
- 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
- WebUI: added ability to disable modem update notifications
- 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
- 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
- HNAT: improved WAN->LAN packet offloading
- Mobile: improved mobile services stability when SIM card is lost during SMS sending
- Mobile: updated bridge/passthrough mode logic to flush ARP and add static ARP entry if MAC is specified
- WebUI: added partial data loading to APN database page
- Mobile: improved SMS sending timeouts during network issues

- Mobile: added metric to default gateway when using passthrough mode
- WebUI: added validation for 2 same APNs
- WebUI: updated Band selection field to show duplex modes in Mobile General page
- 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
  - OpenVPN: added the bridge option for selecting the network device to be bridged with
  - OpenVPN: added possibility to create more than one TAP client
  - Auto Reply: added available SMS message parameters to "Message text" input
  - Modbus Client: allow using diacritics in SMS alarms
  - 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
  - SSTP: updated package version to 1.0.19
  - Mosquitto: updated package version to 2.0.17
  - Tailscale: updated package version to 1.62.1
- **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
  - GPL: added offline package preparation command for GPL builds
  - Speedtest: added multiple connections support to improve accuracy
  - LED: added power LED control
  - Kernel: updated version to 4.14.336
  - Libcap: updated package version to 2.69
- **Fix**
  - **Network**
    - WebUI: fixed static routing creation for GRE instance
    - Network: fixed DHCPv4 relay mode enabling
    - Mobile: fixed PIN code set after modem restart
    - Mobile: fixed cases where 5G NSA network type was shown incorrectly
    - Mobile: fixed an issue where using SIM change command on one SIM slot modems would reset connection
    - Mobile: fixed an issue where message storage would not be checked correctly

- Mobile: fixed temperature value sometimes returning 0
- Mobile: fixed deny data roaming being ignored in some cases when switching networks
- **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
  - Hotspot: fixed password validation for locally created users and signed-up users
  - Hotspot: fixed session invalidation after deleting registered user
  - Hotspot: fixed SMS OTP password reuse
  - Hotspot: fixed firewall rule creation
  - Modbus Client: fixed issue where service freezes when SMS alarm is sent
  - WebUI: fixed data loading error in Input/Output > Post/Get page
  - MQTT Publisher: fixed device/router topic naming bug
  - Azure IoT Hub: fixed 'contentType' telemetry message parameter
  - UPnP: updated package version to 2.3.4
- **System**
  - NTP Client: fixed 'Count of time synchronizations' execution when synchronization to mobile operator is chosen
  - 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
  - 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-2022-4269
  - CVE-2022-4603
  - CVE-2022-23308
  - CVE 2022-45061
  - CVE-2023-0466
  - CVE-2023-6129
  - CVE-2023-6915
  - 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-2023-52435
- CVE-2024-25062
- CVE-2024-27913
- CVE-2024-22365

## [TRB500\\_R\\_00.07.06.10](#) | 2024.04.04

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

## [TRB500\\_R\\_00.07.06.8](#) | 2024.03.25

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

## [TRB500\\_R\\_00.07.06.6](#) | 2024.03.04

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

## [TRB500\\_R\\_00.07.06.5](#) | 2024.02.21

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

## [TRB500\\_R\\_00.07.06.3](#) | 2024.01.17

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

## [TRB500\\_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

- **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

- **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

- **WebUI**

- Added Tailscale VPN support
    - Renewed user interface design
    - Added network interface name change functionality
    - 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

- **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
    - 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
    - Updated Operator state field to show if modem is in limited service
    - Added message when SIM card requires PIN/PUK code in Status -> Mobile page

- **System**
  - Added Mosquitto CVE patch 2023-28366
  - Added Mosquitto CVE patch 2023-3592
  - Updated cURL version to 8.4.0
  - Updated kernel version to 4.14.328
  - 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 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
  - **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 Cumulocity app not sending any telemetry data
    - Fixed Call Utilities failure when caller id is hidden during a call
    - Fixed default profile SMS Utilities I/O status rule configuration in Profiles 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 realtime graphs responsive design issues
    - Fixed not all LAN interfaces shown in dropdown in Hotspot service page
    - Fixed modem updater legacy firmware flashing

- **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

## [TRB5\\_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

## [TRB5\\_R\\_00.07.05](#) | 2023.10.09

- **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

- **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

- **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
- 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 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

◦ **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
- Added Hotspot service support
- 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 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
- 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
- **System**
  - Updated kernel version to 4.14.319
  - 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 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
- Fixed modem temperature retrieval
- **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 received SMS messages parsing with trailing whitespaces
  - Fixed VPN status rule message text in SMS Utilities
- **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 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 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
- Fixed error when user has no write permissions in Speed Test page
- **System**
  - 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-2023-1077 vulnerability
  - Patched CVE-2023-3776 vulnerability
  - Patched CVE-2023-33476 vulnerability
  - Patched CVE-2023-28484 vulnerability
  - Patched CVE-2023-29469 vulnerability
  - Patched CVE-2023-31490 vulnerability
  - Patched CVE-2023-35001 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 log messages not showing sent SMS info

## **TRB5\_R\_00.07.04.5 | 2023.07.24**

- **Improvements**

- **Network**

- Added metric field support in BGP Route-maps 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 device showing 5G connection when 5G connection is not established or configured

- Fixed modem not establishing mobile connection by failing to parse MBN list

## [TRB5\\_R\\_00.07.04.4](#) | 2023.06.26

- **Improvements**

- **Network**

- Improved mobile operator query methods and operator name parsing in various services
    - Improved the reboot sequence in case of CEFS issues

- **Services**

- Improved UPNP lease file validation

- **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 registration status value bug when performing SIM switch
    - Fixed possibility to add a network that is not yet created on a firewall zone

- **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

## [TRB5\\_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 an issue where sometimes PIN/PUK code was deleted when performing a SIM switch

- **Services**

- Fixed incorrect mobile data usage provided to RMS service

## [TRB5\\_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 libwiinfo 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 Port-based VLAN ID calculation issue
    - 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 frr vulnerability CVE-2022-37035
    - Removed ability for non root users to edit scripts that get executed as root

## [TRB5\\_R\\_00.07.04.1](#) | 2023.03.24

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

## [TRB5\\_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
- 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
  - Improved mobile throughput offloading into LAN
- **Services**
  - Added MQTT support to I/O Juggler
  - 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
- **System**
  - Updated bash to version 5.1.16
  - Extended firmware validation messages
  - 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
- **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
  - 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 interface creation logic so that no more than one mobile interface can be created
  - Fixed device reachability via USB when LAN to WAN is enabled
- **Services**
  - 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
  - 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 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
  - Fixed mobile network type LED indications when device is in Bridge or Passthrough modes
  - Fixed LAN port LEDs staying on after being disabled
  - 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

## [TRB5\\_R\\_00.07.03.4](#) | 2023.02.09

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

## [TRB5\\_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

## [TRB5\\_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
    - Fixed memory leak pn Port Events
    - Fixed SIM PIN persistent storing
    - Added renegotiation option for ethtool
  - **Services**
    - Fixed libxml2 vulnerability CVE-2022-40303
    - Fixed an IPsec Phase one & two setting migration issue
  - **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

## [TRB5\\_R\\_00.07.03](#) | 2022.12.16

- **New**
  - **Network**
    - Firewall DMZ page
  - **Services**
    - Java package
    - SFTP server support
    - OPC UA client
  - **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

#### ◦ **Services**

- 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
- Added port events support

#### ◦ **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
  - Implemented modem temperature display
- **Fix**
  - **Network**
    - 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
    - Fixed 5G connection state checking
    - Fixed LED operation when device is connected to 5G
    - Fixed mobile passthrough mode for single ethernet port devices
  - **Services**
    - 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 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 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 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

## [TRB5\\_R\\_00.07.02.8](#) | 2022.09.16

- **New**
  - Initial firmware release