Firmware Release Notes

NTC-222

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Document history

This document covers the following products:

NTC-222

VER.	DOCUMENT DESCRIPTION	DATE
v0.1	First beta release	27 August 2018
v1.1	Includes enhancements to firmware version 2.0.84.0	21 February 2019
v1.2	Includes enhancements to firmware version 2.0.88.0	14 May 2019
v1.3	Includes enhancements to firmware version 2.0.89.0	7 June 2019
v1.4	Added warning regarding unique passwords for units without passwords printed on the label	20 June 2019
v1.5	Includes enhancements to firmware version 2.0.99.0	15 June 2020
v1.6	Remove duplicate Security TT# reference	3 August 2020
v1.7	Includes enhancements to firmware version 2.1.22.0	30 June 2023
v1.8	Includes enhancements to firmware version 2.1.35.0	1 July 2024
v1.9	Includes enhancements to firmware version 2.1.36.0	30 July 2024

Table i. - Document revision history

Contents

Release information

ITEM	DETAILS
Product code	NTC-222
Router firmware version	2.1.36.0
Development status	Official
Firmware file name	ntc_220_2.1.36.0.cdi MD5: 79c760255411e4f7e9e15ad744ce0387
Firmware file size	73277696 bytes
NTC-22x SDK	SDK_Bovine_ntc_220_2.1.36.0.tar.bz2 MD5: 8b14d34ad83ba122ec83e8002ff76552
NTC-22x SDK size	248387490 bytes
Date	30 July 2024

Release history

v2.1.36.0

Enhancements

- AC-342: Admin user cannot login via Web UI if LDAP is disabled.

v2.1.35.0

New features

- AC-285: Added Pulse support on I/O pins
    - Refer to the NTC-220 User Guide for usage.
- AC-305: Added support for LDAP/S authentication
    - Refer to the NTC-220 User Guide for usage.

Enhancements

- AC-110: Reduced the frequency of time daemon messages in the system log.
- AC-122: Improved USB storage drive management.
- AC-174: Reduced the frequency of time sync messages from the network in the system log.

- AC-194, AC-200: Improved LTE band configuration management.
- AC-205: Improvements to Ping Watchdog.
- AC-207: Restored Cumulocity agent compatibility.
- AC-280: Improved filtering of events to syslog server.
- AC-289: Resolved minor compatibility bugs with Chrome and MS Edge browsers.
- AC-307: Improved SSH key management.
- AC-316: Various security improvements.
- AC-320: Improvement to the Ignition Sensing capabilities.

v2.1.22.0

New features

- A second LAN IP address is now supported. (AC-140)
- Features such as Site Settings, Serial Data Status, Network Quality and VLAN are now available across the NTC-22X series. (TT#42886)
- Python3 is now supported. (AC-164)

Enhancements

- System packages are now protected from accidental deletion in Web UI. (TT#42900)
- OpenVPN Cipher and MTU options are now configurable through Web UI. (TT#42637, TT#40959)
- The status page is now hidden if a user is not logged in. (TT#42901)
- The default TR-069 inform time is now 3600 seconds. (TT#42857)
- IPSEC VPN status now shows the correct value when the link is down and DPD action is configured as 'Restart'. (TT#44457)
- DC voltage power reading is now accurate. (AC-131)
- Language updates to Web UI to use more inclusive terminology. (TT#42889)
- jQuery has been updated to a newer version. (TT#42888)
- Curl has been updated to a newer version. (TT#42894)
- DNSMasq has been updated to a newer version. (TT#42898)
- OpenSSL has been updated to a newer version. (TT#42893)
- OpenVPN has been updated to a newer version. (AC-157)
- LWM2M now reports the correct Radio Signal Strength in RDM. (TT#42895)
- RDB variable *"system.time.source"* now returns the correct value (TT#42897)
- Data Roaming is now turned ON by default. (TT#42902)
- Device now shows the Advanced Status Channel number (EARFCN) instead of Channel Number (UARFCN) when the device is registered to WCDMA. (TT#43631)
- Device no longer loses date and time sync when cellular network is the time server source. TT#42005
- Web UI no longer experiences issues where occasionally no content is shown in the browser. (TT#41931)

- An issue with some previous firmware versions where TR-069 could not contact RDM server through HTTPS has been resolved. (TT#42705)
- The Event Notification RDB variable is now automatically cleared. (TT#43113)
- The filter rule "*0.0.0.0/0*" can now be added to the filter list. (TT#43154)
- Various security improvements (TT#42318, TT#42088, TT#42887, TT#41640, TT#43052, TT#44453)

v2.0.99.0

New feature

- Device now supports IPV6 Wireless WAN connection.

Enhancements

- Can now connect on 10Mbps on Ethernet Port.   (TT#39027)
- Improved the factory password handling for the existing customers based on device serial number.   (TT#38796)
- Device now remembers the DO pin status after reboot.   (TT#39775)
- Corrected the Ethernet Port Status display.   (TT#39879)
- Various security improvements.   (TT#39068, TT#39608, TT#39029, TT#39715, TT#24771, TT#39985, TT#39693)

v2.0.89.0

New features

- Implemented a 'Skip' button for users who wish to use the randomly generated factory password.

Enhancements

- Stored server private key is now encrypted (TT#25137)
- System Input validation and sanitisation have been improved (TT#25137, TT#25138)
- Administration page passwords are now masked (TT#26344)
- Fixed a cosmetic issue related to the display of the current network name (TT#38147)
- SMS Password field now accepts over 120 characters (TT#26621)
- Fixed a cosmetic issue related to display of HSDPA/HSUPA categories under LTE and GSM coverage (TT#26728)
- SNMP Module Temperature OID now returns correct module temperature (TT#27442)
- Data profile roaming option is now OFF by default (TT#37880)
- Fixed an issue with inbound TCP connections to PPP serial (TT#37750)
- Improved the user input validation mechanism (TT#37931)
- Removed the reconnect delay option from the user interface (TT#25562)
- The Advanced Status page now shows the PCI (Physical Cell Identity) information for LTE connections (TT#25569)

- The Advanced Status page now shows TA (Tracking Area) information for LTE connections (TT#25570)
- Improved handling of ESM rejection codes (TT#25572)
- Updated LTE signal mapping (TT#26521)
- Implemented firmware signature key feature (TT#37933, TT#37934)
- Manual selection of a forbidden network is no longer allowed (TT#37935)
- Implemented unique factory password for each device (TT#38284)
- Fixed an issue with Data Stream Manager IP modem endpoint which prevented settings from being saved (TT#37908)

v2.0.84.0

Enhancements

- TR-069 settings are persistent after a factory reset via Web UI, physical button, SMS and SNMP   (TT#24676)
- Network Time (NTP) is now set to 'ON' by default   (TT#25023)
- SNMP configuration for version v3 added three missing data fields for Security Level:"Authentication, privacy" settings (TT#25294)
- SNMP configuration for version v3 with Security Level:"no auth/Noprivacy" can be saved with the Engine ID suffix field left blank   (TT#25305)
- SNMPv3 now displays the authentication and privacy fields when SNMPv1/v2 is saved and used   (TT#25306)
- SNMPv3 Authentication, privacy security levels function correctly   (TT#25307)
- TR-069 Device Info now displays the correct model (NTC) in its description field (TT#25388)
- Replaced the .pdf User Guide in the router's firmware file with the correct version   (TT#25433)
- Module firmware upgrade via TR-069 works   (TT#25454)
- System log displays details successful login attempts as well as failed attempts   (TT#25467)
- USB OTG cable connection drivers install correctly   (TT#25556)
- The Networking > Wireless WAN > Operator settings > Band Settings' Change band drop down menu now also includes: "all supported bands on WCDMA & GSM"   (TT#25561)
- Long APNs (100 char limit) and UserNames/Passwords (200 char limit) can be saved and used   (TT#25563)
- GPS coordination behaviour improved   (TT#25564)
- Device now registers to LTE upon initial boot   (TT#25601) (TT#25602)
- On the Status page the "Allowed bands" field shows the current operator settings made in Networking > Wireless WAN > Operator settings > Band Settings' Change band drop down menu   (TT#25603)
- In Recovery Mode the Restore button on the Settings page and the Reboot button on the Reboot page work correctly (TT#25604)
- SMS Whitelist Passwords can now contain @#$%^& symbols   (TT#25605)
- When a user successfully saves a settings change, the page scrolls up to fully display the "Success! Your configuration changes were successfully saved and applied……." message   (TT#25610)
- All Recovery Mode functionality now works correctly in Firefox   (TT#25611)
- Operator Settings page now shows LTE Band 2   (TT#25613)
- Updated text in factory default password pop-up   (TT#25665)

- Band Settings options are now region based   (TT#25712)
- Device now correctly connects via WCDMA when band locked to WCDMA   (TT#25808)
- Device now correctly connects to a specific WCDMA band after a manual scan   (TT#26254)
- USB OTG cable connection works correctly in Windows 7   (TT#26312)
- Advanced Status page correctly displays the Channel number   (TT#26332)
- Manually upgrading module firmware now shows successful log message once upgraded   (TT#26389)
- Fixed issue where Outbound SMS messages were not sent in certain scenarios   (TT#26400)
- PPP Serial server now works correctly   (TT#26401)
- Factory reset and reboot in recovery mode now redirects to HTTPS   (TT#26616)
- Updated Help page image used for the User Guide   (TT#26722)
- Channel Number (UARFCN) under LTE coverage corrected to EARFCN   (TT#26724)
- Corrected the username displayed on the Password configuration page of the wizard   (TT#26727)
- Status page correctly displays the module variant in the 'Model' field   (TT#26730)
- Profile 1 Automatic APN selection can be set to "OFF"   (TT#27454)
- SMS whitelist definition values can be entered and saved   (TT#27455)
- SMS send and receive and config/commands function correctly   (TT#27456)

Known issues

None

v2.0.65.0

Known issues

- Serial port data incomplete when receiving bursts of data   (TT#24577)
- User Guide stored on the device is not the correct document   (TT#24625)

Upgrade instructions

Please refer to the steps described in the **NTC-221-222-223-224 Firmware Upgrade Guide.pdf** (doc no. FI01155) document.