Release Note NRSW 4.3.0.104

Project Name: HOTSPOT

Abstract:

This document represents the release note for NetModule Router Software 4.3.0.104. It informs on new functionality, corrections and known issues of this software version of NetModule's router series in comparison to release 4.3.0.102.

Keywords:

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1 Release Information

NetModule Router Software:

Version:	**4.3.0.104**
Date:	**October 31, 2019**

HOTSPOT Extensions:

Version:	**1.12**
Date:	**November 05, 2019**

Supported Hardware:

NetModule Router	Hardware Version
NB800	V2.0 - V2.2
NB1600	V1.0 - V3.3
NB1601	V1.0 - V1.3
NB1800	V2.4 - V2.6
NB1810	V2.4 - V2.6
NB2700	V1.0 - V2.7
NB2710	V1.0 - V2.7
NB2800	V1.0 - V1.4
NB3700	V2.0 - V4.4
NB3701	V1.0 - V1.4
NB3710	V2.0 - V4.3
NB3711	V1.0 - V1.4
NB3720	V2.0 - V4.3
NB3800	V1.0 - V1.4

Unsupported Hardware:

NetModule Router
NB1300 Series
NB2200 Series
NB2300 Series
NB2500 Series
NB2600 Series

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2 New Features

Case-#	Description
51824 57961 59624	**SDK improvements** New function usleep() provides sub second sleep intervals. New API function to nb_syslog_p() for logging to different log levels.
56066	**SNMP service improvements** System temperature is now provided on SNMP poll.
57895	**Added support for certificate chains for OpenVPN export mode configuration** It is possible now to install certificate chains for OpenVPN using the expert mode configuration process.
58465	**Netflow interface supervision for Ethernet and WWAN interfaces** Netflow was introduced for WLAN interfaces and is now available for other device types like Ethernet and WWAN as well.
59359	**Key-parameter support for GRE tunnels** GRE tunnels now support the Key-parameter which is used to separate different GRE tunnels between two end-points.
56584	**HOTSPOT: MAC addess authentication** The hotspot interface will now support the authentication via MAC address if a RADIUS configuration is used.
56306	**HOTSPOT: Change of Authorization (CoA)** The hotspot interface will now suppot CoA if a RADIUS configuration is used.
56306	**HOTSPOT: DHCP settings** It is now possible to change the DHCP setting of the hotspot interface

3 Fixes

The following issues and problems have been fixed.

Case-#	Description
56086	**Watchdog on failing SDK script did not work** A change in the watchdog API was not properly handled by the SDK scripting engine. Resulting in watchdog to fail to restart the System on error. This was fixed.
56374	**Problems on switch-over between WAN and WWAN** Under rare conditions the switch over between WAN and WWAN did not work as expected.
56972	**Ethernet performance** Fixed low throughput problem on ethernet ports of NB3701 and NB3711.
57584	**Time synchronization required after reboot on NB2700** The system time was not recovered correctly from the internal RTC after soft-reboot, which made an additional time synchronization from an external source (NTP, GNSS) mandatory. This was fixed.
57659	**Time synchronization with GNSS could fail** On devices equipped with Sierra Wireless MC7455 the time synchronization with GNSS failed. This was fixed in gpsd.
57675 58339 58544 58697 58698 59424	**GUI improvements** The GUI failed to set some special characters like '&'. If VLAN is configured on bridge devices the bridge interfaces showed up several times in the web GUI. This was fixed. Due to a mistake in the input sanity check it was not possible to change some user options without changing the user's password. This was fixed. For actions which require the actual password which is normally stored only as salted hash, it is still required to provide the password, but this (new) password may be the same as the old one. Due to a failure in string escaping functionality some AT commands failed, which can be issued from the web interface for debug purpose. This was fixed. Fixed typo
57783	**IPsec tunnels failed to start** Due to timing issues on setups with several IPsec tunnels some of these sometimes failed to start. The start procedure was changed to prevent this failure.
58034	**NB2710 failed to start up 2nd WWAN module** The 2nd WWAN module on NB2710 would not come up with recent NRSW releases. This was fixed.
58318	**Old configuration files failed to apply** Some very old configuration files failed to apply with error message 'Unable to create backup'. This was fixed.
58525	**Bridge interface lost on software update** Software bridge interfaces (like BR1, BR2) might get lost on SW-Update and needed to be reconfigured after the update was finished. This was fixed and the bridge interfaces are preserved on software update.
59020	**Storage date of last "Factory Default Config" is not updated on consecutive storage events** If the function to store the current configuration as factory default is called several times, the timestamp of the latest store event is not updated. This was fixed.
59053	**SDK improvements** nb_dio_count failed to remove obsolete data resulting in wrong data. This was fixed.
59054	**GNSS data show up delayed** We have seen GNSS data to be delayed by some seconds due to a failure in buffer handling. This was fixed.

Case-#	Description
59383	**4G-only WWAN connection failed to connect** Under certain conditions LTE modules failed to connect if 4G-only was selected even through LTE network was available. That was fixed.
59399	**Unstable WWAN connection with LTE-First setting** With LTE-First some LTE modules failed to establish connection under poor LTE conditions on software release 4.3.0.102. This was fixed.
59453	**Connection tracking for FTP service missing** On software releases since 4.3.0.100 the connection tracking for FTP was not configured correctly. This was fixed.
59833	**WLAN configuration** The WLAN configuration could break on software update to 4.4.0.100 and 4.3.0.103. This has been fixed.

4 ECC conversion

The flash on NB1600, NB2700, NB2710, NB3700, NB3710 and NB3720 provides an automated error correction using ECC. With release 4.1.0.100 we changed the ECC length from 1-bit ECC to 4-bit ECC which provides better error correction. On first boot after the update was performed the data on the flash is automatically converted to use the new ECC setup. While this conversion is performed the LEDs show a running light for about 30 seconds.
If you switch back to an older software release like 4.0.0 the migration is reverted.
We tested updates and down-grades to and from 4.0.0 and 3.8.0. Updates to or from older versions are not supported. If you run an older release or want to downgrade to an older release or a feature release like 3.8.2 you are advised to migrate via 4.0.0 as an intermediate release.
To revert the migration on downgrade the SPL boot loader release 4.1.0 stays in place. It can be downgraded in a second sofware update process initiated from the target release after the first reboot.
Software updates with recovery images require special attention. You must not use recovery images 4.0.0 and older for systems running 4.1.0 and newer. If you want to use recovery images please contact our support at router@support.netmodule.com.

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6 Change History

Version	Date	Name	Reason
1.0	November 5, 2019	walther	Final

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