

Release Note Hotspot 1.5

Project Name: Hotspot

Abstract:

This document represents the release note for NetModule Router Software Hotspot 1.5 based on NRSW 4.0.0.104. It informs on new functionality, corrections and known issues of the current software version of NetModule's router series.

Keywords:

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	Author	Benjamin Amsler
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	Technical CEO	Thomas Siegrist

1 Release Information

NetModule Router Software:

Version: **4.0.0.104**
Date: **January 26, 2017**

Hotspot Extensions:

Version: **1.5**
Date: **January 26, 2017**

Supported Hardware:

NetModule Router	Hardware Version
NB1600	V1.0 - V3.3
NB2700	V1.0 - V2.7
NB2710	V1.0 - V2.7
NB2800	V1.0 - V1.4
NB3700	V2.0 - V4.3
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
43135 43880 44439	Support for Huawei MC7430 The Huawei MC7430 is now supported. This modem does not support voice calls yet.
43644 44144	New SDK Functions USSD requests can now be issued using the <code>nb_ussd_query</code> function. We further added an <code>uptime</code> function which returns the number of seconds since bootup.
44049	DHCP Server on Alias Address The DHCP server was restricted to operate on the primary address. It can also use the alias address now.
42044	NB2800 Console It's now possible to enable the printout of the serial console.
44099	NB2800 Voice Gateway The NB2800 supports now up to 4 voice modems with up to 3 concurrent channels.
43053	LXC Device Configuration It is now possible to configure CAN devices which will be available in the LXC guest.
44296 44492 44117 44580	New SNMP Extensions The <code>nbGnssTable</code> is now showing horizontal speed, vertical speed and the track angle. The <code>nbAdminTable</code> is now showing the current system date. Counters for downloaded/uploaded data in the <code>nbWanTable</code> are now wrapped correctly. The IF-MIB is now returning proper <code>ifOperStatus</code> values. We also fixed some typos in the VENDOR MIB description.
44012	TAB Completion for parrotlog The parrotlog application does now expand any parameter if the TAB key is hit.
44336	Enhanced IPsec Supervision IPsec tunnels will now be reloaded individually if they are down for 1 minute. The whole IPsec service will be restarted if all tunnels are down for 3 minutes.
44570 44191	HOTSPOT: New Extensions A second RADIUS server can now be configured. All Universal Access Method (UAM) configuration parameters are now located under the UAM tab and include options to set the UAM homepage which specifies the URL of the homepage to which unauthenticated users will be redirected to. You can further set the UAM secret now which is used when communicating with a non-local UAM server.

3 Fixes

The following issues and problems have been fixed.

Case-#	Description
44591	Link State Flapping on NB3720/NB3800 The Ethernet switch on NB3720/NB3800 misleadingly reported a flapping link state. This has been resolved.
43900	Voice Daemon Failures Under some circumstances it may happened that the voice daemon terminated if a SIM switch has run at the same time which resulted in a reboot of the system. This has been fixed.
43865	WTP Encrypted WLAN Managed WLAN faced a race condition in case of rekeying errors which dropped the associated station. This has been fixed.
43941 43812	EM770 Modem Resets It happened that a Huawei EM770 was not properly recognized after a reset. This has been fixed.
44061 44031 41681	Modem Detection on NB2800/NB3800 It occurred sporadically that not all modems could have been recognized. This has been fixed.
44328	WWAN Connections Not Dialed It occurred in very rare cases that the WWAN connection could not be dialed. This has been fixed.
43899	Catch Broken GPS Coordinates The GPS daemon can now detect out-of-bounds coordinates and ignore the corresponding NMEA frames. This can be enabled by setting <code>gpsd.0.maxdist</code> to a maximum distance. Any frames reporting a bigger linear distance will then be ignored and the module will be reset if the situation does not improve.
43972	No GPS Client Connections The GPS daemon did not accept new client connections if certain NMEA frames have been retrieved. This issue has been fixed.
43210 44518 44032	IPsec Firewall Issues It occurred that firewall rules bound to an IPsec interface were not working correctly. Now, expect rules for IPsec peers are only created if IPsec is active.
43837	IPsec Connections with AH SHA512 IPsec connections using the authentication algorithm SHA512 did not come up. This has been fixed.
44027 44571	Static Multicast Routing It occurred that static multicast routes have not been applied in every case. This has been fixed.
42505 44438	FPGA Ping Check The FPGA supervision occasionally returned false positives. This has been fixed.
43893 44114	Importing Certificates Stacked CA certificates or WLAN client keys were not imported correctly. This has been fixed.
43938 40359 44243 44618 44625 44606 44609	SDK Issues Generating a techsupport via SDK cloud block the system. The <code>sysinfo</code> function suffered a memory leak. The <code>nb_scan_networks</code> function accepts uppercase interfaces now. The <code>nb_serial_write</code> function returned zero instead of the number of bytes written. The <code>nb_transfer</code> may have returned an invalid result for https/ftps URLs.
44184	Special Characters in WLAN PSK Special characters (& and \) have not been applied correctly which made the WLAN client authentication fail. This has been fixed.

Case-#	Description
44489	DNS Server Configuration It occurred that the DNS server did not come up if no DHCP server has been configured. This has been fixed.
44219	Empty Configuration After Update An empty configuration may have been generated if config conversion potentially failed after an update. This has been fixed.
44226	Broken PPPoE Connections In some cases PPPoE connections did not come up. This has been fixed.
44483	Registration Issues ME909 The Huawei ME909 failed to register to LTE with some providers. This has been resolved.
44575	PUK Unlocking PUK unlocking failed in certain cases. This has been fixed.
44368	Empty SMS Gateway Some SIMs do not store the SMS gateway which made the WWAN connection fail. This has been fixed.
43856	SSD Storage Errors Some NB2800 routers up to HW version 1.2 faced a problem with the SSD storage. This has been fixed.
44142	QoS ToS/DSCP The QoS feature neglected the ToS/DSCP bits for some packets. This has been fixed.
44208	Long Bootup The NB1600/NB2700 faced long bootups if the serial port was not used for the console. This has been fixed.
43703	GUI Fixes A software update over the GUI could have failed under some circumstances. Hidden WLAN SSIDs will not be shown anymore. The IP-passthrough page is now listing valid interfaces only. The max. storage size for SDK is now proposing a proper value and unit. Certificates could only be deleted if all files have been installed. Particular AT and USSDs queries failed. The NAPT netmask is now validated correctly. It will be set to /32 if omitted. Show network address instead of IP in NAPT rule summary. The GNSS position page doesn't block anymore if OpenStreetMap service is not reachable. The GNSS position page is now able to handle additional charsets. Several typos on the GNSS and IPsec page have been fixed. The GUI is now able to show stacked certificates. Downloading OpenVPN expert mode files has been fixed.
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44112	CLI Fixes The CLI now also shows the netmask of any LAN interfaces. The supply and ignition voltage on NB2800 is now shown correctly. Scanning the mobile networks timed out in some cases.
43846	
44180	

Case-#	Description
40953	Security Fixes
43980	Access to secret configuration variables for non-admin users is now forbidden.
44089	Run factory reset if recovery procedure is triggered via UBOOT.
44216	Don't trigger unwanted software updates.
43761	The ntpdate application has been upgraded to version 4.2.8p9.
44478	The strongswan suite has been upgraded to version 5.5.1.
44288	
44298	The kernel also received fixes for the following CVEs:
44385	
44629	CVE-2016-7910
44386	CVE-2016-7911
44387	CVE-2016-7914
44383	CVE-2016-7915
	CVE-2016-7916
	CVE-2016-7917
	CVE-2016-8646
	CVE-2016-8650
	CVE-2016-8655
	CVE-2016-8666
	CVE-2016-9555
	CVE-2016-9793
	CVE-2016-9794
	CVE-2016-9806
	We are not affected by CVE-2016-9685 and CVE-2016-10147.
44722	Hotspot GUI fixes
44424	The GUI will now prefer a WLAN interface as local hotspot interface. We also fixed some issues when
43254	applying parameters. Secret hotspot configuration parameters are now stored encrypted.

4 Known Issues

Items listed here represent minor problems known at release time. These issues will be resolved in a later version.

Case-#	Description
32507	IPsec Expert Mode The IPsec expert mode files are not installed automatically after a software update. Tunnels need to be reconfigured using the GUI/CLI.
32507	No VRRP on Bridged Interfaces VRRP over bridged interfaces is not implemented.
36992	No SMS Delivery Reports SMS delivery reports are currently not possible with Option GTM661/GTM671, Huawei EM820 and Sierra MC7710 modems.
42851	No RSTP on Bridged TAP Devices RSTP does not work on bridged TAP devices.

5 Pitfalls

Items listed as pitfalls are potential problems that may arise because of specific environmental conditions. There are currently no fixes planned for these issues.

Case-#	Description
44759	HOTSPOT: RADIUS Server DNS resolution The hotspot application will not come up if RADIUS servers are specified as host names and cannot be resolved. Please use IP addresses until this issue will be solved.

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7 Change History

Version	Date	Name	Reason
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NetModule AG is located at:

Meriedweg 11
 CH-3172 Niederwangen
 Switzerland

info@netmodule.com

Tel +41 31 985 25 10

Fax +41 31 985 25 11

For more information about NetModule AG visit the NetModule website at www.netmodule.com.