

# Release Note NRSW 4.5.0.107

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**Project Name:** NRSW

## Abstract:

This document represents the release note for NetModule Router Software 4.5.0.107. It informs on new functionality, corrections and known issues of this software version of NetModule's router series.

## Keywords:

NetModule, Software Development, NRSW, Release Note

## Document Control:

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## 1 Release Information

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### NetModule Router Software:

Version: **4.5.0.107**  
Date: **Nov 02, 2021**

### Supported Hardware:

NetModule Router	Hardware Version
NB800	V2.0 - V2.2, V3.2 (Rev. B02)
NG800	V3.0 - V3.1
NB1600 (*)	V1.0 - V3.3
NB1601	V1.0 - V1.6
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
NB2810	V1.2
NB3700 (*)	V2.0 - V4.4
NB3701	V1.0 - V1.5
NB3710 (*)	V2.0 - V4.3
NB3711	V1.0 - V1.5
NB3720 (*)	V2.0 - V4.3
NB3800	V1.0 - V1.5

(\*) Please note that release 4.6 will be the last LTS version of NRSW for this routers. If you still use this hardware please get in touch with our sales team. Release 4.6 will be supported until end of 2024.

### Unsupported Hardware:

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

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## 2 New Features

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Case-#	Description
65846	<b>Firewall address translation based on SRC and DST ports</b> It is now possible to filter packets for inbound and outbound address translation by source and destination port. So far it was only possible to use either source or destination port.
69348 73371	<b>GUI improvements</b> Message shown after web session timeout was improved. The module current firmware is displayed at the firmware update page as additional information.
72659	<b>System downgrade to discontinued software releases disabled</b> It is not possible any more to down-grade to software versions below 4.3. These software releases are out of service and it is not recommended to use them any more.

### 3 Security Fixes

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The following security relevant issues have been fixed.

Case-#	Description
74370	<b>CVE-2020-3702 ath9k patches</b> Fix for WLAN chips vulnerable to eavesdropping.

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## 4 Fixes

The following issues and problems have been fixed.

Case-#	Description
<b>67950</b>	<b>GUI improvements</b>
<b>71246</b>	The loading time of web pages of the configuration interface was reduced.
<b>72755</b>	Some configuration items were not reset to factory state when a OpenVPN connection was deleted.
<b>73432</b>	This was fixed.
<b>74157</b>	The WLAN channel scan showed a non-existing channel 0. This was fixed.
<b>74443</b>	Received SMS could not be displayed in the web interface. This has been fixed.
<b>75116</b>	It could happen that the web interface showed a misleading error message, when bridge settings changes. Some web pages of the configuration interface did not wait until the configuration was completely applied. This could result in error logs shown in the web interface. Now these pages will show a spinner until the configuration was applied. Port based NAPT routing configuration could fail with an error message even though the configuration was technically correct. This was fixed.
<b>71446</b>	<b>Fix of sporadic watchdog triggered reboots</b> In the log files we received from a customer we could see that the SMS daemon had triggered a system reboot. This is a very rare event which had its origin in a timing issue at the start sequence of the daemon.
<b>73670</b>	<b>Discovered Bluetooth devices were not deleted</b> The automatic removal of inactive devices did not work, Inactive devices were not deleted from the list of active devices after inactivity timeout.
<b>74541</b>	<b>Bridge netfiltering not set up correctly</b> The global setting to enable bridge netfiltering was only applied if software bridge devices were present.
<b>74890</b>	<b>IPsec with FQDN target not handled correctly</b> The FQDN of an IPsec connection was evaluated at configuration time and firewall rules were applied accordingly. This is not correct. The FQDN may resolve differently at run time and also the device may have no domain name service at configuration time at all. Now the FQDN is resolved at connection time.
<b>74901</b>	<b>CLI improvements</b> The program version was printed incorrectly at program start. This was corrected.
<b>75051</b>	<b>WAN LED on NG800 did not show correct behavior</b> The WAN LED was not configured correctly. This was fixed.
<b>75347</b>	<b>GNSS failed to restart after LTE module reset</b> On some u-blox LTE/GNSS modules the GNSS service did not handle a module restart correctly and could not acquire a GNSS fix. The module reset is handled correctly now.
<b>75423</b>	<b>Quagga BGP could not connect with PSK credentials</b> The PSK credentials of Quagga were not processed correctly. This was fixed.

## 5 Known Issues

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

Case-#	Description
75480	<p><b>Long reconnect time of Toby-L2 LTE module</b></p> <p>We have seen rare situations where the Toby-L2 took up to 8 minutes to reconnect to the network even though it was in coverage. We were able to detect such situations and send a reset command to the module which reduced the reconnect time to below one minute.</p> <p>Unfortunately this counter measures do break the eSIM communication in some situations and therefore it was removed from the standard initiation procedure.</p> <p>If you happen to see sporadic long disconnect periods in situations where coverage should be available please get in touch with our support team.</p>

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## 6 ECC conversion

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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 software 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](mailto:router@support.netmodule.com)

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## 8 Change History

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Version	Date	Name	Reason
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