

# Release Note NRSW 4.0.0.109

---

**Project Name:** HOTSPOT

## Abstract:

This document represents the release note for NetModule Router Software 4.0.0.109. It informs on new functionality, corrections and known issues of the current software version of NetModule's router series.

## Keywords:

NetModule, Software Development, HOTSPOT, Release Note

## Document Control:

<b>Document:</b>	<b>Version</b>	1.0
	<b>File</b>	HOTSPOT-RN-4.0.0.109-1.9
	<b>Status</b>	Valid
<b>Creation:</b>	<b>Role</b>	<b>Name</b>
	Author	Patrick Walther
	Review	Benjamin Amsler
<b>Approval</b>	<b>Role</b>	<b>Name</b>
	Director Product Development	Michael Enz

## 1 Release Information

---

### NetModule Router Software:

Version: **4.0.0.109**  
Date: **February 03, 2018**

### HOTSPOT Extensions:

Version: **1.9**  
Date: **June 26, 2018**

### 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 - V1.3
NB3710	V2.0 - V4.3
NB3711	V1.0 - V1.3
NB3720	V2.0 - V4.3
NB3800	V1.0 - V1.3

### Unsupported Hardware:

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

**NetModule Insights**  
Subscribe to our mailing and get the latest  
news about software releases and much more



---

## 2 New Features

---

Case-#	Description
50888	<b>HOTSPOT: binary files update</b> The HOTSPOT binary files have been updated and compiled with LARGER_LIMITS flags.

---

### 3 Fixes

The following issues and problems have been fixed.

Case-#	Description
<b>46376</b>	<b>SSH server certificate download failed</b> The certificates which were provided for download from the web GUI were not in the right format to reinstall them into another device. This was fixed.
<b>46383</b> <b>49062</b> <b>49186</b>	<b>GUI improvements</b> Some special characters like '@' or '!' were not allowed as APN password in web interface. This was fixed. When SIM cards were switched between WWAN modules there was a misleading warning showing up. This has been fixed. After configuration of a new WWAN interface it could happen that the new interface was not shown in the list of configured devices until the page was reloaded. This was fixed.
<b>46742</b>	<b>Linux kernel CVEs</b> CVE-2017-7533 A race condition can lead to local user privilege escalation
<b>47196</b>	<b>SDK example script for SMS receive/transmit failed sometimes</b> The SDK example script on SMS receive/transmit had an error in the DIO handling. This was fixed. It was improved for better readability and cleaner code as well.
<b>47237</b>	<b>Boot loop after operator error on software update</b> We have seen devices to run into a boot loop after the administrator performed a configuration update after a partial software update. The bug fix will prevent any configuration updates via file upload until a pending software update was applied on reboot. Never the less it is recommended to reboot the device after performing a software update.
<b>47491</b>	<b>GPS got stuck under certain condition</b> Sometimes the GPS module (issue was seen at ME909u) got stuck and would not produce a fix until system restart. This was fixed.
<b>47552</b>	<b>Memory leak in SMS send function</b> When sending from a SSH connection temporary file were sometimes not deleted, if the connection was interrupted early by the SSH client. If that happened very often /tmp/ could fill up with effect to the operating system. That was fixed.
<b>47997</b>	<b>Don't forward packages of local networks</b> Packets which belonged to networks of local interfaces were routed over IPsec links, if they were neither originated from nor targeted to the router (iptables FORWARD chain). That was fixed.
<b>48005</b>	<b>SPL update failed</b> In very rare occasions it could happen that an update of the SPL boot loader failed. We have seen that on devices which were up for about one year without reboot. To guarantee a proper update the updater will check the up-time and reject updates if the device was not rebooted for a long time.
<b>48013</b>	<b>Disabled forwarding of DHCP offers</b> In setups with more than one WAN link DHCP offers on one of the WAN links were sometimes forwarded to the other WAN interface. This behavior was not intended and got fixed by disabling forwarding on WAN links until the link is fully operational and all firewall rules apply.
<b>48165</b> <b>48303</b>	<b>GPS supervision</b> We have seen situations where the GPS failed to provide data, but the supervision did not trigger a restart of the GPS or of the router. The root cause for the missing GPS data was fixed as well as the behavior of the GPS supervision in failure state of the GPS daemon.
<b>48185</b>	<b>Support for Serial interface on NB3701</b> NB3701 with serial RS232 interface is now fully supported.

Case-#	Description
<b>48196</b>	<b>Voice daemon fails and triggers reboot</b> There have been situations where the voice daemon failed to start and triggered a system reboot. The voice daemon was fixed.
<b>48252</b>	<b>Group alias of nobody to nogroup added</b> There was a case where a customer relied on the existence of the system group nobody for advanced expert mode OpenVPN configuration. For backwards compatibility with the existing configuration the group nobody was created as alias to nogroup.
<b>48280</b>	<b>SNMP users not created on configuration update</b> SNMP users were not created when applying a configuration file. Therefor SNMP requests with these user credentials failed. This was fixed.
<b>48352</b>	<b>NB2700 port Ethernet 5 not turned off</b> Even when disabled port Ethernet 5 was not switched off and still showed link activity. The port is now shut down correctly.
<b>48601</b> <b>48864</b> <b>49173</b>	<b>SDK improvements</b> Due to a failure in parameter check nm_modbus_reply could fail even though the given parameters were correct. This was fixed. The SDK process crashed on the command sha256hash on NB2800 and NB3800 family. This was fixed. In rare conditions nb_status nb_status returned NULL instead of data even though the request was legit. This was fixed.
<b>48648</b> <b>48649</b> <b>48650</b> <b>48651</b> <b>48652</b>	<b>Linux Kernel security bug fixes</b> CVE-2017-16525 Possible attack via crafted USB device in USB serial module CVE-2017-16531 Possible attack via crafted USB device in kernel USB core CVE-2017-16534 Possible attack via crafted USB device in kernel USB core CVE-2017-16535 Possible attack via crafted USB device in kernel USB core CVE-2017-1000410 Possible remote kernel information leak via Bluetooth L2CAP
<b>48664</b>	<b>VLAN packet loss</b> If there is a MTU set up on a LAN interface VLAN packets which are routed over this interface will get lost if the VLAN's MTU is not set up accordingly.
<b>48674</b>	<b>MTU setup of VLAN interfaces failed</b> MTU setup was applied to the wrong VLAN interface if there were different VLAN defined on different LAN interfaces. This was fixed.
<b>49098</b> <b>49101</b> <b>49102</b>	<b>Security bug fixes</b> CVE-2018-1000007 curl HTTP authentication leak in redirects CVE-2017-8816 curl NTLM buffer overflow via integer overflow CVE-2017-8817 curl FTP wildcard out of bounds read
<b>49118</b>	<b>IPsec expert mode configuration missing in configuration download</b> The IPsec expert mode files were not included into the configuration files that can be downloaded from the web interface. This was fixed.
<b>49292</b>	<b>HOTSPOT: Upgrade and downgrade issue</b> The HOTSPOT configuration was lost if the software was upgraded to a new major release. This has benn fixed.
<b>49684</b>	<b>HOTSPOT: Wrong DNS resolution</b> In certain cases it was possible that the resolution of DNS addresses went wrong if static hosts were configured. This has been fixed.
<b>51771</b>	<b>HOTSPOT: DHCP information wrong in webgui</b> In webgui the DHCP status was shown as inactive if a interface has been configured as HOTSPOT. This has been fixed.

---

Case-#	Description
51852	<b>HOTSPOT: Config update failed</b> Configuration update failed if HOTSPOT has been configured. This has been fixed.

---

## 4 Known Issues

---

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

Case-#	Description
48313	<p><b>Serial interface of NB3701 shows some boot log data</b>            Even if the serial interface usage is set to "none" or "device server" some early boot ASCII messages will show up at a speed of 115200 baud per second. This cannot be fixed.</p>

## 5 Pitfalls

---

Items listed as pitfalls are potential problems that may arise because of specific environmental conditions.

Case-#	Description
--------	-------------



## 6 OSS Notice

---

We inform you that NetModule products may contain in part open source software. We are distributing such open source software to you under the terms of GNU General Public License (GPL)<sup>1</sup>, GNU Lesser General Public License (LGPL)<sup>2</sup> or other open source licenses<sup>3</sup>.

These licenses allow you to run, copy, distribute, study, change and improve any software covered by GPL, Lesser GPL, or other open source licenses without any restrictions from us or our end user license agreement on what you may do with that software. Unless required by applicable law or agreed to in writing, software distributed under open source licenses is distributed on an "AS IS" basis, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.

To obtain the corresponding open source codes covered by these licenses, please contact our technical support at [router@support.netmodule.com](mailto:router@support.netmodule.com).

---

<sup>1</sup>GPLv2 license is available at <http://www.gnu.org/licenses/gpl-2.0.txt>

<sup>2</sup>LGPL license is available at <http://www.gnu.org/licenses/lgpl.txt>

<sup>3</sup>OSI licenses (ISC License, MIT License, PHP License v3.0, zlib License) are available at <http://opensource.org/licenses>

## 7 Change History

---

Version	Date	Name	Reason
1.0	2018-06-26	walther	Final

### Copyright © 1998 - 2018 NetModule AG; All rights reserved

This document contains proprietary information of NetModule AG. No part of the work described herein may be reproduced. Reverse engineering of the hardware or software is prohibited and is protected by patent law. This material or any portion of it may not be copied in any form or by any means, stored in a retrieval system, adopted or transmitted in any form or by any means (electronic, mechanical, photographic, graphic, optic or otherwise), or translated in any language or computer language without the prior written permission of NetModule AG.

The information in this document is subject to change without notice. NetModule AG makes no representation or warranties with respect to the contents herein and shall not be responsible for any loss or damage caused to the user by the direct or indirect use of this information. This document may contain information about third party products or processes. This third party information is out of influence of NetModule AG therefore NetModule AG shall not be responsible for the correctness or legitimacy of this information. If you find any problems in the documentation, please report them in writing by email to [info@netmodule.com](mailto:info@netmodule.com) at NetModule AG.

While due care has been taken to deliver accurate documentation, NetModule AG does not warrant that this document is error-free.

"NetModule AG" and "NetModule Router" are trademarks and the NetModule logo is a service mark of NetModule AG.

All other products or company names mentioned herein are used for identification purposes only, and may be trademarks or registered trademarks of their respective owners.

The following description of software, hardware or process of NetModule AG or other third party provider may be included with your product and will be subject to the software, hardware or other license agreement.

NetModule AG is located at:

Meriedweg 11  
 CH-3172 Niederwangen  
 Switzerland

[info@netmodule.com](mailto: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](http://www.netmodule.com).