

Maulbeerstrasse 10 CH-3011 Bern Switzerland info@netmodule.com http://www.netmodule.com Tel +41 31 985 25 10 Fax +41 31 985 25 11

Release Note NRSW 4.0.0.111

Project Name: NRSW

Abstract:

This document represents the release note for NetModule Router Software 4.0.0.111. It informs on new functionality, corrections and known issues of this software version of NetModule's router series in comparison to the current old-stable release 4.0.0.110.

This release is the last planned release of the 4.0.0 cycle. We recommend to update existing projects to 4.1.0.

Keywords:

NetModule, Software Development, NRSW, Release Note

Document Control:

Document:	Version	1.0
	File	NRSW-RN-4.0.0.111
	Status	Valid

Creation:	Role	Name
	Author	Moritz Rosenthal
	Review	Benjamin Amsler

Approval	Role	Name
	Director Product Development	Michael Enz



1 Release Information

NetModule Router Software:

4.0.0.111 Version:

Date: November 19, 2018

Supported Hardware:

NetModule Router	Hardware Versio
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

NB800 Series

NB1300 Series

NB1601 Series

NB1800 Series

NB2200 Series

NB2300 Series

NB2500 Series

NB2600 Series



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

Release Note NRSW 4.0.0.111 2/8



2 New Features

Case-#	Description
48684	Wait for configuration change task to be finished Changing a configuration setting via CLI or SDK does not block. A new function was implemented to request if all pending tasks have been finished and it is safe to send new configuration change requests.
49268	Support for new GNSS modules Added support for new Ublox NEO-M8 modules.
49269	uBlox TOBY-L2 support The uBlox Toby-L2 LTE modem is now supported.
53880	Conversion of configuration version 1.12 Configuration files of version 1.12 can be imported or converted on down grade from newest SW release.

Release Note NRSW 4.0.0.111 3/8



3 Security Fixes

The following security relevant issues have been fixed.

Case-#	Description
52029	Update of Lighttpd On release 4.2.0.100 Lighttpd was updated to version 1.4.50. On older releases Security relevant issues were back ported. CVE-2015-3200: Injection of log entries fixed on lighttpd
53324	Log display in web interface vulnerable to Cross-Site-Scripting (XSS) attack The web interface which displays the system log was vulnerable to JavaScript XSS attacks. An attacker capable of placing malitious content in the system log could execute JavaScript code in the web browser of the user.
53513	Security bug fixes on 3rd party SW packages CVE-2015-3200: Use-after-free fixed in Linux kernel

Release Note NRSW 4.0.0.111 4/8



4 Fixes

The following issues and problems have been fixed.

Case-#	Description	
41149	Roaming failed with Huawei ME909u-521 Devices equipped with Huawei ME909u-521 LTE modules sometimes failed to connect in roaming environment.	
49327	Mismatch between VLAN network settings and DHCP settings triggers reboot In situations where the VLAN network settings (network address/netmask) did not fit with the DHCP range configured for that network the router would go into reboot. This was fixed. Now the DHCP server on the mis-configured interface will not be started and a warning is given to the user.	
49353	Authorities certificates were not used for all HTTPS downloads Some functions where data is downloaded from a server the "Authorities" certificates were not used. E.g. it was not possible to update WWAN module firmware from HTTPS.	
51090	SDK improvements Fixed typo in modification time of files in nb_transfer_list.	
51475	uBlox TOBY-L2 improvements Clients connected to the LAN side of the router could not communicate to the WAN network, because IP forwarding was disabled. That has been fixed.	
51575 53592	GUI improvements The interface numbering was wrong during modem firmware update. This has been fixed. Clicking on 'Cancel' in the certificate settings accidentally applied the changes.	
52309	User names starting with 'admin' or 'root' not able to login Additional users starting with 'admin' or 'root' like 'admin-user' were not able to login after change of administrator password.	
52357	Ping supervision failed on IP pass-through In IP pass-through the ping supervision failed to contact the server and therefor restarted the router even if the WWAN connection was fine.	
52927	No connection after switching to roaming network If a router with Huawei ME909 LTE module changes from 3G home network to 4G roaming network it sometimes lost connection and did not recover until back in home network.	
53587	Certificate key handling Changing the certificate key of the system could fail and leave the system without usable certificate keys. This was fixed.	
53608	Empty user password affected other users If the setting 'user.0.password' contained an empty string all other users were not able to log in any more. This is not a valid configuration anyway, but it was not intended behavior either and therefor was fixed.	

Release Note NRSW 4.0.0.111 5/8



5 ECC conversion

The flash on NB1600, NB2700, NB2710, NB3700, NB3710 and NB3720 provides an automated error correction using ECC. 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.

Release Note NRSW 4.0.0.111 6/8



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)¹, GNU Lesser General Public License (LGPL)² or other open source licenses³.

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.

Release Note NRSW 4.0.0.111 7/8

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

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

³OSI 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	2018-11-19	rosenthal	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 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:

Maulbeerstrasse 10 CH-3011 Bern 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.

Release Note NRSW 4.0.0.111 8/8