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Release Note NRSW 4.1.0.113

Project Name: NRSW

Abstract:

This document represents the release note for NetModule Router Software 4.1.0.113. It informs on new functionality, corrections and known issues of this software version of NetModule's router series.

End of Life Notice:

Please note that this release is the last planned bug-fix release for NRSW 4.1 branch. There will be no further bug-fix releases not even on security issues according to our release plan. You are adviced to upgrade your systems to latest 4.3, 4.4 or 4.5 Release. For more information please visit https://wiki.netmodule.com/documentation/releases or contact our support team.

Keywords:

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Creation:

Role	Name	
Author	Moritz Rosenthal	
Review	Benjamin Amsler	

Approval

Role	Name
Director Product Development	Benjamin Amsler



1 Release Information

NetModule Router Software:

Version: 4.1.0.113
Date: Mar 19, 2021

Supported Hardware:

NetModule Router	Hardware Version
NB800	V2.0 - V2.2
NB1600	V1.0 - V3.3
NB2700	V1.0 - V2.7
NB2710	V1.0 - V2.7
NB2800	V1.0 - V1.4
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

Unsupported Hardware:

NetModule Router

NB1300 Series

NB1601 Series

NB1800 Series

NB2200 Series

NB2300 Series

NB2500 Series

NB2600 Series

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2 Security Fixes

The following security relevant issues have been fixed.

Case-#	Description
70209 70210 70211 70217	Prevent stored Cross-Site-Scripting attacks Some user settings were displayed directly in the web interface making it vulnerable to Stored Cross-Site-Scripting attacks. To exploit this vulnerability administrative access was required.
70212	Authenticated read and delete of arbitrary files via web interface A directory traversal mistake made it possible for logged-in administrative users to read and delete arbitrary files on the file system.
70213	GUI vulnerable to Cross-Site-Reques-Forgery A CSRF-Token was introduced to prevent targeted attacks to logged-in administrators.
70214	Users with CLI shell access could extend their privileges For users with CLI shell access it was possible to open a regular linux command line shell.
70215	Information breach for user logged in to shell A user with limited rights who was logged in to a shell (for example via SSH, Telnet or serial interface) was able to request confidential configuration values. Non-Administrative users are not able to log in into a shell and therefore this attack should not be exploitable, never the less the access rights to the configuration management were fixed.
70216	Incorrect permission assignment for critical recources Some files like /etc/shadow were readable by non-adminitator users. This is a potential security risk. It is not possible to configure a login with shell access or read the file system for non-administrative users, but never the less the access was restricted to root users as it is generally recommended.



3 Fixes

The following issues and problems have been fixed.

Case-#	Description	
69956	IP packet loss on LTE modules IP packets with a specific length were lost on Transmission via LTE link on Toby-L2 in some rare situations. The USB communication was changed to fix this systematic failure.	



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	Mar 19, 2021	Moritz Rosenthal	Release note
0.1	Mar 15, 2021	Moritz Rosenthal	First draft

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