

Firmware for NPort 5400 Series Release Notes

Version: v4.1

Build: 25022613

Release Date: Mar 17, 2025

Applicable Products

NPort 5400 Series

Supported Operating Systems

N/A

New Features

N/A

Enhancements

N/A

Bugs Fixed

• An issue blocking the wide temperature model from upgrading to $vX.0 - vX.6(X \ge 4)$.

Changes

N/A

Notes

• NPort 5400-T models with firmware version v4.0 and earlier must first be upgraded to firmware v3.14.11 before upgrading to v4.1. Please contact Moxa's TS team to obtain the middleware version v3.14.11.



Build: 24101618

Release Date: Nov 20, 2024

Applicable Products

NPort 5400 Series

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Upgrades mbedTLS to v2.28.8.
- Disables SNMP by default.

Bugs Fixed

- Account set via NPort Administrator-Configuration may fail.
- Using the event group OpMode in the remote log may cause the NPort to reboot.
- MXview One can't recognize NPort 5000 Series with SNMPv3.
- NPort may send abnormal DHCP request when using DHCP relay.
- NPort may append unnecessary options to the DHCP request.
- Disable EEE for stable connections.
- Security issue: HTML XSS attack prevention on certain web pages.
- Correct the data packing feature when the delimiter buffer is full.
- A potential problem of a variable going out of bound.
- or firmware v3.14 onwards, update file system version to prevent downgrading to old hardware when using new hardware.
- IP filtering Plus setting not included when exporting the configuration file.
- An invalid fd input in FD_ISSET API causing unexpected behavior and DUT crash.

Changes

N/A

Notes



Build: Build 21032913

Release Date: Mar 31, 2021

Applicable Products

NPort 5410/5430 (Rev. 3.2 and later) and NPort 5450 (all Rev.)

Supported Operating Systems

N/A

New Features

- Supports remote log function.
- Supports turning on HTTPS with TLS 1.2 by default.
- Supports MXconfig v2.6 and MXview v3.1.20.
- Added a notification regarding the limitation on the length of sensitive data.

Enhancements

- Solved security issues: CWE-319, CVE-2020-1938, CVE-2013-0631.
- Records username, source IP, and port number in "Event Log" and "System Log".
- Upgraded mbedTLS to v2.7.15.
- Disables Telnet console by default.
- Disables TLS 1.0/1.1 by default.
- Adds an account lockout mechanism for web, Telnet, and MOXA service.
- Removes SSL 2.0 and lower (keep TLS 1.0/1.1/1.2).
- Improved the UI and UX on "Configuration file import/export and pre-shared key".
- Extended the validity period of the certificate.
- Rejects an unrecognized host header when HTTP is configurable.

Bugs Fixed

- NPort sent a DUP ACK while handshaking.
- The NPort would still send "ALIVE" command packets after serial data had been transmitted.
- Saved configuration from DHCP server to flash too frequently.
- An email event could not be sent while the SNMP service was disabled.
- The default gateway was invalid when the IP address ended with ".0".
- The connection status could not be displayed correctly in NPort Administrator—Port Monitor.
- TCP client mode could not connect to TCP server mode on the same NPort.
- Account's password could not be set correctly via NPort Administration Suite 1.x version.
- The device might restart after getting the SNMP MIB value of tcpConnRemPort.
- The NPort might send a duplicate ACK in TCP server mode while doing a handshake.
- The operation mode RFC2217 was missing.
- Sent NTP requests frequently when NTP connection failed.
- Syslog server could not receive Cold Start event log when DUT's IP was assigned by DHCP server.
- The message of NTP sync success was not easy to clarify.
- The message of the logout page showed the incorrect device model name.
- NPort would respond to system time for "timestamp" ICMP packet.
- Web server would respond to nonexistent file.

Changes

N/A

Notes

• This firmware applies to NPort 5410/5430 (Rev 3.2 and later) and NPort 5450 (all Rev.).



Build: Build 19032122

Release Date: Mar 29, 2019

Applicable Products

NPort 5400 Series

Supported Operating Systems

N/A

New Features

- Supports HTTPS.
- Supports MXview auto-topology function.
- Supports MXconfig.
- Supports SNMPv2c.
- Supports IGMP.

Enhancements

• Accessible IP list can now be used to restrict all device services.

• Complies with Moxa Security Guidelines on the following: Account Authentication Management, Network Service Management, and Audit and Log Management.

• CVE-2017-14028: An attacker may be able to exhaust memory resources by sending a large amount of TCP SYN packets.

• CVE-2017-16715: An attacker may be able to exploit a flaw in the handling of Ethernet frame padding that may allow for information exposure.

• CVE-2017-16719: An attacker may be able to inject packets that could potentially disrupt the availability of the device.

Updates the web UI.

Bugs Fixed

• NPort does not send SNMP Authentication Failure trap.

• Pair connection mode cannot resolve the domain name.

Changes

N/A

Notes



Version:	v3 12
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Build: Build 17030709

Release Date: Mar 15, 2017

Applicable Products

NPort 5410, NPort 5430, NPort 5430I, NPort 5450, NPort 5450-T, NPort 5450I, NPort 5450I-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

N/A

Bugs Fixed

• The user's password and SNMP community name may be exposed by a buffer overflow issue.

Changes

N/A

Notes



Build: Build 16100411

Release Date: N/A

Applicable Products

NPort 5410, NPort 5430, NPort 5430I, NPort 5450, NPort 5450-T, NPort 5450I, NPort 5450I-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Enhanced web login security and supports 5 users logged in simultaneously.
- Extended HTTP challenge ID length from 32 bits to 256 bits.
- IP of NPort can be set to addresses ending with 0 or 255.
- Enabled the default password "moxa".
- Increased CSRF protection mechanism.
- Increased XSS protection mechanism.
- Supports "ARP probe" in RFC5227. NPort would respond to ARP requests with sender IP address 0.0.0.0.

Bugs Fixed

- NPort cannot send e-mail using Google's SMTP server.
- In pair connection mode, master does not pull down RTS/DTR signal after the TCP connection is broken.
- Command port sends lots of "D_ASPP_CMD_ALIVE" packets after running for 50 days.

• NPort may reboot or hang from several buffer overflow attacks through Telnet, SSH, DSCI, SNMP, HTTP, and HTTPS.

Changes

N/A

Notes



Build: Build 15041515

Release Date: N/A

Applicable Products

NPort 5410, NPort 5430, NPort 5430I, NPort 5450, NPort 5450-T, NPort 5450I, NPort 5450I-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Uses model name instead of "NULL" for SNMP object "sysDescr".
- Supports connecting to the server by domain name and the server IP will change dynamically.
- Supports updating the ARP table by gratuitous ARP.
- Supports time synchronization with an NTPv4 server.

Bugs Fixed

• If an SNMP GETNEXT command is issued on an object that does not exist, 'no such name error' is displayed.

• When DHCP renews IPs, if the IP was originally given by a relay agent, NPort should send a DHCP request to the relay agent, not the DHCP server.

• In Real COM mode, when the modem status of the NPort's serial port is changed frequently, the NPort will sometimes fail to notify the change to the driver.

• In reverse telnet mode, the NPort will try to subnegotiate the COM port control options without option negotiation first.

Changes

N/A

Notes