



Firmware for NPort IA5000A Series Release Notes

Version: v2.1	Build: 24092017
Release Date: Nov 20, 2024	

Applicable Products

NPort IA5450A, NPort IA5450A-T, NPort IA5450AI, NPort IA5450AI-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Adds a configuration setting to reject an unrecognized host header in HTTP.
- Upgrades mbedTLS to v2.28.8.
- Disables SNMP by default.

Bugs Fixed

- Web console cannot be accessed via dual IP.
- 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.
- 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.
- 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.
- Gratuitous ARP is not updated.

Changes

N/A

Notes

N/A



Version: v2.0	Build: Build 21022213
Release Date: Mar 02, 2021	

Applicable Products

NPort IA5450A Series

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 v3.2.
- A notification regarding the limitation on the length of sensitive data.

Enhancements

- Solved Nessus CVSS v3.0 issues, which scores exceeded 7 and above.
- Solved security issues.
- 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.
- Added an account lockout mechanism for web, Telnet, and MOXA service.
- Removed SSL 2.0 and lower (keep TLS 1.0/1.1/1.2).
- Improved UI and UX on "Configuration file import/export and pre-shared key".
- Extended the validity period of the certificate.

Bugs Fixed

- TCP used to duplicate ACK while handshaking.
- The NPort would still send "ALIVE" command packets after serial data has been transmitted.
- The configuration from the DHCP server would be saved to flash frequently.
- An email event could not be sent while the SNMP service was disabled.
- The system became invalid when the IP address ended with ".0"
- 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.
- Send NTP requests frequently when NTP connected failed.
- Syslog server cannot receive Cold Start event log when DUT's IP is assigned by DHCP server.
- The message of NTP sync success is not easy to clarify.
- The message on the logout page shows an incorrect device model name.

Changes

N/A

Notes

Please upgrade to version v1.7 before updating to version v2.0 and after.



Version: v1.7	Build: Build 21022213
Release Date: Mar 02, 2021	

Applicable Products

NPort IA5450A Series

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Improved the utilization of system memory.

Bugs Fixed

- 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.

Changes

N/A

Notes

N/A



Version: v1.6	Build: Build 19032122
Release Date: Mar 31, 2019	

Applicable Products

NPort IA5450A Series

Supported Operating Systems

N/A

New Features

- Supports HTTPS.
- Supports MXview auto-topology function.
- Supports MXconfig.
- Supports SNMPv2c.
- Supports dual IP.
- Supports redundant LAN.

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.
- Remove unnecessary information displayed on the Web, Telnet, and Serial consoles during the login process.
- Remove the TTL limitation (1) on multicast packets.

Bugs Fixed

- Pair connection mode cannot resolve the domain name.
- The password may be exposed in the Moxa service.

Changes

N/A

Notes

N/A



Version: v1.5	Build: Build 18051118
Release Date: Mar 29, 2019	

Applicable Products

NPort IA5450A Series

Supported Operating Systems

N/A

New Features

- New Flash memory because of the end-of-life of the previous one.

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

N/A



Version: v1.4	Build: Build 18051118
Release Date: Nov 10, 2016	

Applicable Products

NPort IA5450A, NPort IA5450AI, NPort IA5450AI-T, NPort IA5450A-T, NPort IA5450A-IEX, NPort IA5450AI-IEX, NPort IA5450AI-T-IEX, NPort IA5450A-T-IEX

Supported Operating Systems

N/A

New Features

- Supports new flash component to deal with component end-of-life.
- Supports new RTC RX8130CE.
- Supports 12-byte serial numbers.

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

N/A



Version: v1.4	Build: Build 16100514
Release Date: N/A	

Applicable Products

NPort IA5450A, NPort IA5450AI, NPort IA5450AI-T, NPort IA5450A-T, NPort IA5450A-IEX, NPort IA5450AI-IEX, NPort IA5450AI-T-IEX, NPort IA5450A-T-IEX

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 email 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

N/A



Version: v1.3	Build: Build 15041515
Release Date: N/A	

Applicable Products

NPort IA5450A, NPort IA5450AI, NPort IA5450AI-T, NPort IA5450A-T, NPort IA5450A-IEX, NPort IA5450AI-IEX, NPort IA5450AI-T-IEX, NPort IA5450A-T-IEX

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.
- Supports RFC2217 NOTIFY-LINESTATE for Transfer Shift Register Empty and Transfer Holding Register Empty.

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.
- In RFC2217 Mode, if the Ethernet data has many FF characters, some data may be lost while passing data to the serial side.
- Modified parsing data mechanism to fix import file failure.
- Unable to see the baud rate through a Telnet console on the "View settings" side.
- System reboots when receiving IGMP packets.
- The trap settings for port auto warning in the configuration file will be set to email settings after import.
- The destination and local port settings of TCP client mode would not be set to the correct values after setting the values from the web page.
- Web Console cannot display web pages when refreshing or switching web pages frequently using IE8.

Changes

N/A

Notes

N/A