



Firmware for NPort 5100 Series (NPort 5130/5150) Release Notes

| | |
|-----------------------------------|------------------------------|
| Version: v3.11 | Build: Build 23081519 |
| Release Date: Mar 15, 2024 | |

Applicable Products

NPort 5130, NPort 5150

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Security enhancement: Validates port number before accessing values (for port alias setting).
- Security enhancement: Validates port number before accessing values (for setting/getting APIs).
- Security enhancement: Fixes a potential overflow problem.
- Re-codes tsearch file to avoid using GNU Core Utilities to prevent any potential FOSS-related issues.

Bugs Fixed

- NPort may send abnormal DHCP request when using DHCP relay.
- NPort may append unnecessary options to a DHCP request.

Changes

N/A

Notes

N/A



| | |
|-----------------------------------|------------------------------|
| Version: v3.10 | Build: Build 22071915 |
| Release Date: Jul 26, 2022 | |

Applicable Products

NPort 5100 Series

Supported Operating Systems

N/A

New Features

N/A

Enhancements

N/A

Bugs Fixed

- The “RS-232” serial interface option is not included in the web console settings.

Changes

N/A

Notes

N/A



| | |
|-----------------------------------|------------------------------|
| Version: v3.9 | Build: Build 21032913 |
| Release Date: Mar 31, 2021 | |

Applicable Products

NPort 5100 Series

Supported Operating Systems

N/A

New Features

- Supports the MCC Tool.
- Added a notification regarding the limitation on the length of sensitive data.

Enhancements

- Solved security issue: CVE-1999-0511

Bugs Fixed

- NPort might hang when using in a public network.
- NPort did not send SNMP Authentication Failure trap.
- Unable to get complete network info when max connection was full with NPort Fixed TTY driver.
- Force transmit time could not work when it was set at 20 ms in UDP operation mode.
- The default gateway was invalid when the IP address ended with ".0".
- NPort should not support IP forwarding.
- NPort sent a DUP ACK while handshaking.
- Saved configuration from DHCP server to flash too frequently.

Changes

N/A

Notes

N/A



| | |
|-----------------------------------|------------------------------|
| Version: v3.8 | Build: Build 17102516 |
| Release Date: May 15, 2019 | |

Applicable Products

NPort 5130, NPort 5150

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- ICS-CERT ICS-VU-398374 Moxa NPort 5110 ethernet leaking vulnerability report.
- ICS-CERT ICS-VU-034903 Moxa NPort 5110 vulnerability report.
- ICS-CERT ICS-VU-923791 Moxa NPort 5110 flood attack vulnerability report.

Bugs Fixed

- Pair connection mode could not resolve domain name.

Changes

N/A

Notes

N/A



| | |
|-----------------------------------|------------------------------|
| Version: v3.7 | Build: Build 17030709 |
| Release Date: Mar 07, 2017 | |

Applicable Products

NPort 5130, NPort 5150

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Encrypted SNMP community string in Moxa communication protocol.

Bugs Fixed

- For specific Moxa communication commands, the password might be exposed.
- If the Auto report to IP was not specified and SNMP community was set by web console, the Moxa communication command oftentimes returned part of the SNMP community string.

Changes

N/A

Notes

N/A



| | |
|-----------------------------------|------------------------------|
| Version: v3.6 | Build: Build 16100411 |
| Release Date: Oct 04, 2016 | |

Applicable Products

NPort 5130, NPort 5150

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Supports "ARP probe" in RFC5227. The NPort would respond to ARP requests with sender IP address 0.0.0.0.
- Enhanced web login security and support for the login of five users simultaneously.
- Extends HTTP's challenge ID length from 32 bits to 256 bits.
- Enables the default password "moxa."
- Increases the CSRF protection mechanism.
- Increases the XSS protection mechanism.
- The IP address of the NPort can be set to end with 0 or 255.

Bugs Fixed

- The NPort could not send an e-mail by using Google's SMTP server.
- In pair connection mode, the master did not pull down RTS/DTR signal when the TCP connection was broken.
- The command port sent a lot of "D_ASPP_CMD_ALIVE" packets when running for 50 days.
- The NPort rebooted or stalled due to several buffer overflow attacks on Telnet, SSH, DSCI, SNMP, HTTP, and HTTPS.

Changes

N/A

Notes

N/A



| | |
|-----------------------------------|------------------------------|
| Version: v3.5 | Build: Build 15041515 |
| Release Date: Apr 15, 2015 | |

Applicable Products

NPort 5130, NPort 5150

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Uses the model name instead of "NULL" for SNMP object "sysDescr".
- Supports the connection to the server by domain name, and the server's IP address would change dynamically.
- Supports updating ARP table by gratuitous ARP.
- Improved the URL encoding issue when users typed the character '@' on the email trap settings while using Firefox.

Bugs Fixed

- If a GETNEXT command of SNMP was issued on an object that did not exist, it displayed 'no such name error'.
- During the DHCP renewing IP stage, if the IP address was originally given by a relay agent, the NPort would send the DHCP Request to the relay agent, and not the DHCP server.
- In Real COM mode, the NPort sometimes failed to notify changes to the driver if the NPort's serial port was changed frequently.
- Under reverse telnet mode, the NPort tried to sub-negotiate the COM port control options without option negotiation.

Changes

N/A

Notes

N/A



| | |
|-----------------------------------|------------------------------|
| Version: v3.4 | Build: Build 11080114 |
| Release Date: Aug 01, 2011 | |

Applicable Products

NPort 5130, NPort 5150

Supported Operating Systems

N/A

New Features

- Accepts composite AT command, for example, AT&FE1S0=2S2=43S3=13S4=10M1Q0V1.

Enhancements

- Fine-tune the accuracy of the "inactivity time" function when in TCP server mode.

Bugs Fixed

- The NPort would restart when receiving UDP packets that were larger or equal to 32768 bytes in size.
- The NPort did not receive the DHCP IP address when the DHCP server sent an ACK packet when its source IP and server identifier option were different, and if the relay agent IP address field was 0.0.0.0.
- The NPort failed to get the DHCP IP address after receiving DHCP NAK, issued by the DHCP server that didn't send DHCP Offer.
- Due to an Internet routing issue, the NPort dropped the connection and discarded data if the TCP FIN packet was received before regular data.
- Sometimes the TCP PUSH packet would immediately be retransmitted due to defects in the retransmission timeout algorithm.
- If AP wanted to create a TCP connection to a nonexistent host, other TCP packets would be delayed.
- When the NPort received DHCP NAK from a DHCP server, it would drop subsequent packets issued by the relay agent of that DHCP server.
- TCP next sequence number problem: When NPort sent last data packet (length > 0) with FIN flag being set, the NPort only added length to current sequence number to form the next sequence number (but the correct next sequence number = current sequence number + length + 1, since FIN counts 1). This incorrectly calculated sequence number made the NPort neglect the ACK from the peer and kept sending Keep-Alive packets to the peer.
- The NPort sometimes discarded received Ethernet packets because the packets were ruined by illegal memory access.
- When only the TX software flow control was enabled (for example, sending FAX application), the NPort would not stop the data transmission on receipt of the XOFF character.
- The password was plaintext in the hyperlink.
- The NPort could not receive any AT command characters when the TCP connection failed.
- The XON/XOFF flow control was canceled when receiving the XON character after the SETXOFF command was executed.

Changes

N/A

Notes

N/A



| | |
|-----------------------------------|-------------------|
| Version: v3.3 | Build: N/A |
| Release Date: Jan 03, 2011 | |

Applicable Products

NPort 5130, NPort 5150

Supported Operating Systems

N/A

New Features

N/A

Enhancements

N/A

Bugs Fixed

- When the Telnet console was disabled, the operation mode of the serial port could not work.

Changes

N/A

Notes

N/A



| | |
|-----------------------------------|-------------------|
| Version: v3.2 | Build: N/A |
| Release Date: Jan 04, 2010 | |

Applicable Products

NPort 5130, NPort 5150

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Accepts spaces in AT commands. For example, 'AT D T' is the same as 'ATDT'.

Bugs Fixed

- The NPort did not follow the DHCP option field that ended with "End Option". Therefore, the NPort might not receive the IP address from particular DHCP servers.
- Based on RFC 1542, the minimal BOOTP (the UDP data field) should be 300 octets, so we padded it to 300 bytes.
- The NPort's BOOTP packet had no magic cookie in the vendor's information field. According to RFC 1542, if a special vendor-specific magic cookie is not being used, a BOOTP client should use the dotted decimal value 99.130.83.99 as specified in RFC 1497. In this case, if the client has no vendor information to communicate to the server, the octet immediately following the magic cookie should be set to the "End" tag (255), and the remaining octets of the 'vend' field should be set to zero.

Changes

N/A

Notes

N/A