



Firmware for EDS-405A Series (PN models) Release Notes

Version: v3.12	Build: N/A
Release Date: Sep 23, 2025	

Applicable Products

EDS-405A-PN, EDS-405A-PN-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Migrated to 64-bit integers to circumvent the year 2038 limitation.
- Added support for the SSL certificate import CLI command.
- Users can now get the device serial number via SNMP.
- Added support for login failure lockout when accessing the web interface via SSH.

Bugs Fixed

- [MPSA-245831] Enhanced the SSH cryptographic algorithm for improved security.
- Connecting the device to an HSR network over RSTP causes looping.
- The Modbus port information shows an incorrect port status when the port is not in use.
- When repeatedly restarting a Turbo Chain Member switch, the Turbo Chain may occasionally experience looping or the Member switch may become inaccessible.
- The SNMP object ifLastChange shows an incorrect value after the interface status changes.
- The bandwidth utilization shows incorrect information for some ports.
- [CVE-2023-2650] Processing some specially crafted ASN.1 object identifiers or data containing them may be very slow.
- [CVE-2015-9251] jQuery versions prior to v3.0.0 may be vulnerable to Cross-site Scripting attacks.
- [CVE-2019-11358] jQuery versions prior to v3.4.0 mishandle jQuery.extend because of Object.prototype pollution.
- [CVE-2020-11022] [CVE-2020-11023] jQuery versions later than v1.2 and prior to v3.5.0 may execute untrusted code when passing HTML from untrusted sources."
- Partial MAC addresses cannot be read by the SNMP MIB Browser.
- The PVID cannot be configured in VLAN Hybrid mode.
- [Nessus-85582] The web application is potentially vulnerable to Clickjacking.
- Upgraded the encryption algorithm for SSL certificate key generation.
- Enhanced the SSH cipher suite.
- Users are unable to log in via HTTPS after performing a firmware upgrade.
- [CVE-1999-0524] Answering ICMP timestamp requests might lead to remote date disclosure.
- Upgraded the encryption hash for the web login cookie from MD5 to SHA-2.
- The device may perform a cold start when the SSH algorithm mismatches.
- [CVE-2024-12297] Frontend authorization logic disclosure vulnerability.
- When repeatedly restarting a Turbo Ring Slave switch, the Turbo Ring may occasionally experience looping.
- The Management Interface and System Information pages are vulnerable to XSS.
- [CVE-2002-20001] Enhanced the SSH cryptographic algorithm for improved security.
- When deleting the VLAN ID associated with a trunk port in the web interface, the VLAN ID for the trunk port incorrectly shows as VLAN 0 in the CLI.
- [CVE-2025-1680] Prevent host header injection in the web interface.



- [CVE-2024-7695] An out-of-bounds write vulnerability caused by insufficient input validation allows attackers to overwrite memory beyond the buffer's bounds.
- [CVE-2024-9404] Due to insufficient input validation, exploitation of the moxa_cmd service could lead to denial-of-service or service crashes.
- [CVE-2024-9137] Attackers could execute specified commands to perform unauthorized downloads or uploads of configuration files and system compromise.

Changes

- Changed the recommended request packet interval (RPI) setting to 1000 ms.
- SNMP is now disabled by default.
- Modbus is now disabled by default.

Notes

N/A



Version: v3.11	Build: 24011614
Release Date: Feb 03, 2024	

Applicable Products

EDS-405A-PN, EDS-405A-PN-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Enhanced the firmware memory allocation mechanism.
- Improved the handshake mechanism for establishing port links.

Bugs Fixed

N/A

Changes

N/A

Notes

N/A



Version: v3.10	Build: 23061800
Release Date: Aug 31, 2023	

Applicable Products

EDS-405A-PN, EDS-405A-PN-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Added support for additional management interfaces: HTTP, HTTPS.
- Added compatibility with certain non-standard BPDU to prevent broadcast storm.
- If the "TURBO RING" DIP switch is set to ON, only two ports will now be reserved for Turbo Ring. If both the "TURBO RING" and "COUPLER" DIP switches are set to ON, four ports will be reserved.
- When disabling Modbus TCP or Ethernet/IP, the relevant TCP ports (#502 and #44818) will now also be disabled.
- Removed the HTTPS warning for Chrome and Edge browsers when importing the RootCA.

Bugs Fixed

- The "Set device IP" function sometimes does not answer DHCP Discovery messages sent from a DHCP client, resulting in the client not being able to obtain an IP address.
- Users are sometimes unable to connect to the system via SSH.
- The system will unintentionally perform a cold start when using N-Snap to log in via SSH.
- [CVE-2022-40691] A specially crafted HTTP request can lead to disclosure of sensitive information.
- [CVE-2022-40214] Potential tampered messages.
- [CVE-2022-40224] A specially-crafted HTTP message header can lead to denial of service.

Changes

- Removed the "recommended browser" message from the web interface.
- The TACACS+ and RADIUS shared keys and SNMPv3 data encryption key are now cleared after modifying specific configurations (e.g. TACACS+/RADIUS login list, SNMP version, SNMP authentication/encryption method).

Notes

N/A

Version: v3.9	Build: 22030118
Release Date: Mar 24, 2022	

Applicable Products

EDS-405A-PN Series

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Upgraded OpenSSL to 1.0.2k and added support for TLS v1.2.
- Added a memory usage protection function for certain configurations.
- Added an additional encryption option and command to the web UI and CLI.
- Added the “Set” function for standard MIB ifAdminStatus.
- Increased the number of RSTP nodes to 40.
- Added support for HTTPS, SSH, and SSL.

Bugs Fixed

- When Turbo Ring V2 is working alongside Turbo Chain, and the Head Port link turns on or off, the recovery time increases to < 50 ms.
- Turbo Ring V1 does not work with RSTP Force Edge port.
- The system reboots when reading or writing SNMP OID 1.3.6.1.2.1.2.2.1.1.4294967295.
- Turbo Ring V1 does not work properly.
- Accessing LLDP via Telnet causes the device to reboot.
- SNMP responds slowly when querying the MAC table.
- Disabling the Broadcast Storm Control Port function does not work.
- The ABC-01 does not function properly.
- Some counters show incorrect negative values.
- Some counters show abnormal values after resetting.
- The LLDP configuration webpage is vulnerable to javascript injections.
- Reading speeds are slow when adding a new MAC address.
- IEEE 802.1x authentication may fail under certain conditions.
- The "copy startup-config" CLI command causes the system to restart.
- The SFP fiber link behaves abnormally under certain conditions.
- The “get bulk” SNMP command does not work properly for some OIDs.
- TACACS+ authentication would fail under certain conditions.
- OID 1.3.6.1.2.1.17.4.3.1.1 causes the “get” SNMP command to time out.
- The RSTP configuration is missing.
- The Ping function and SNMP do not respond.
- The Turbo Chain recovery time is irregular during warm and cold starts.
- Establishing an SSH connection may cause the system to reboot.
- [MSRV-2017-001][CVE-2019-6518] Plain text storage of a password.
- [MSRV-2017-003][CVE-2019-6526] Missing encryption of sensitive data.
- [MSRV-2017-004][CVE-2019-6524] Improper restriction of excessive authentication attempts.
- [MSRV-2017-005][CVE-2019-6559] Resource exhaustion.
- [MSRV-2017-006][CVE-2019-6557] Buffer overflow in endpoint.
- [MSRV-2017-007][CVE-2019-6522] Device Memory Read.
- [MSRV-2017-009][CVE-2019-6565] Multiple XSS.
- [MSRV-2017-013] Use of a broken or risky cryptographic algorithm.
- [MSRV-2017-014] Use of hard-coded cryptographic key.



- [MSRV-2017-015] Use of hard-coded password.
- [MSRV-2017-018] Weak password requirements.
- [MSRV-2017-019] Information exposure.
- [MSRV-2017-020][CVE-2017-13703] Buffer overflow in the session ID.
- [MSRV-2017-021][CVE-2017-13702] Cookie management.
- [MSRV-2017-022][CVE-2017-13700] Cross-site scripting (XSS).
- [MSRV-2017-026] Use of a broken or unsecure cryptographic algorithm.
- [MSRV-2019-002] XSS vulnerability in the LLDP diagnostic page.
- [MSRV-2019-003] Denial of Service (web service) by improper HTTP GET command.
- [MSRV-2019-004] Denial of Service (web service) by over-sized firmware upgrade through HTTP/HTTPS.
- [MSRV-2019-005] Denial of Service (web service) by excessive length of HTTP GET command.

Changes

N/A

Notes

- MSRV is Moxa's internal security vulnerability tracking ID.



Version: v3.8	Build: Build_17051216
Release Date: Jun 29, 2017	

Applicable Products

EDS-405A-PN, EDS-405A-PN-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

N/A

Bugs Fixed

- User account login authentication error in menu console mode.

Changes

N/A

Notes

N/A



Version: v3.7	Build: Build_17031513
Release Date: N/A	

Applicable Products

EDS-405A-PN, EDS-405A-PN-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Added warning message when default password was not changed.
- Encrypted security keys in user interface.

Bugs Fixed

- Cross-site scripting vulnerability.
- Denial of Service attack vulnerability.
- Privilege escalation vulnerability.
- SSL v2/v3 vulnerability in HTTPS.
- Web console cannot be accessed when the SNMP get bulk service is running.
- Specific CLI command caused the switch to reboot with default settings.
- Adding a new VLAN changed the IGMP querier state from disabled to enabled.
- Saving configurations to ABC-01 cannot be performed via IE browser.
- Rate limit cannot be set in web UI.
- Telnet hangs when SSH is disabled.
- Correct RSTP edge definition in exported configuration file.
- Correct authorization of Radius/TACACS+ login.
- Correct RSTP Auto-Edge behavior.
- System sometimes rebooted after a period of operation while PROFINET is enabled.

Changes

N/A

Notes

N/A



Version: v3.2	Build: Build_14121009
Release Date: N/A	

Applicable Products

EDS-405A-PN, EDS-405A-PN-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

N/A

Bugs Fixed

- Web user interface displayed errors under Java 8 environments.

Changes

N/A

Notes

N/A



Version: v3.1	Build: N/A
Release Date: N/A	

Applicable Products

EDS-405A-PN, EDS-405A-PN-T

Supported Operating Systems

N/A

New Features

- First release for EDS-405A-PN Series.

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

N/A