

# Firmware for EDS-408A Series Release Notes

Version: v3.11 Build: 21110512

Release Date: Dec 14, 2021

## **Applicable Products**

**EDS-408A 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.
- Importing the Turbo Ring Coupling configuration fails under certain conditions.
- 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: v3.10 Build: EDS408A V3.10 Build 19121910

Release Date: Jan 06, 2020

#### **Applicable Products**

**EDS-408A Series** 

### **Supported Operating Systems**

N/A

#### **New Features**

- Added support for HTTPS, SSH, and SSL.
- Added support for new Moxa commands.
- Added support for RSTP up to 40 nodes.

### **Enhancements**

- The default password has changed to "moxa" instead of the field being empty. In addition, for security reasons, the minimum password length must not be less than 4 characters.
- Modified the Java applet to XML and HTML.
- Added memory protection.
- Added support for SNMP Set for standard MIB ifAdminStatus.
- Improved Turbo Ring V2 and Turbo Chain recovery times.
- [MSRV-2017-001][CVE-2019-6518] Added encrypted Moxa service with enable/disable button on GUI to support communication over encrypted commands with MXconfig/MXview.
- [MSRV-2017-002][CVE-2019-6563] Supports random salt to prevent session prediction attack of HTTP/HTTPS.
- [MSRV-2017-003, 004, 005][CVE-2019-6526, 6524, 6559] Added encrypted Moxa service with enable/disable button on GUI to support communication over encrypted commands with MXconfig/MXview.
- [MSRV-2017-011][CVE-2019-6561] Supports browser cookie parameters "same-site" to eliminate CSRF attacks.
- [MSRV-2017-013] [CWE-327] Supports system configuration file encryption mechanism.
- [MSRV-2017-017] Supports HTTPS for secure communication to avoid confidential information being transmitted through clear text.
- [MSRV-2017-021][CVE-2017-13702] Release the cookie once the session expires to avoid the old cookie value being reused.
- [MSRV-2017-022][CVE-2017-13700] Avoid XSS (Cross-site Scripting) attack by regulating the input parameters' format.
- [MSRV-2017-023] Supports configuration backup encryption mechanism to prohibit confidential information from being disclosed.
- [MSRV-2019-002] Avoids XSS (Cross-site Scripting) attack by regulating the input parameters' format of the LLDP diagnostic page.

#### **Bugs Fixed**

- Turbo Ring V1 does not work with RSTP force edge ports.
- SNMP would reboot the system when adding OID 1.3.6.1.2.1.2.2.1.1.4294967295.
- Turbo Ring V1 not working properly.
- The system would reboot when connecting through Telnet when LLDP is enabled and transmitting.
- Slow SNMP response time.
- Storm control would sometimes fail to disable a problematic port.
- ABC-01 not working properly.
- The system freezes when the event log is cluttered.
- Unusual counter behaviour issue.
- Issue with Javacript injection.



- Slow SNMP response when adding a new MAC address.
- 802.1x Request Identify.would sometimes fail to retrieve authentication information.
- The system would reboot when entering specific CLI commands.
- Unstable Turbo Chain behavior when rate limiting is enabled.
- Unstable connection when using fiber links.
- System would reboot when using the SNMP Get Bulk command.
- TACACS authentication would fail under certain conditions.
- SNMP Get would timeout when using OID 1.3.6.1.2.1.17.4.3.1.1.
- The system not saving user RSTP settings.
- Slow SNMP response when pinging a client.
- Error when importing Turbo Ring coupling configuration.
- [MSRV-2017-001][CVE-2019-6518] Plain text storage of a password.
- [MSRV-2017-002][CVE-2019-6563] Predictable Session ID.
- [MSRV-2017-003][CVE-2019-6526] Sensitive data was not encrypted.
- [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 vulnerabilities that may allow remote control.
- [MSRV-2017-007][CVE-2019-6522] An attacker could read device memory on arbitrary addresses.
- [MSRV-2017-009][CVE-2019-6565] No proper validation of user inputs, which allows users to perform XSS attacks.
- [MSRV-2017-011][CVE-2019-6561] CSRF attacks were possible if browser cookie parameters were not correct.
- [MSRV-2017-012] [CWE-121] An attacker could exploit the improper boundary check vulnerability to perform DoS or execute arbitrary codes.
- [MSRV-2017-013] [CWE-327] Administrative credentials could be disclosed.
- [MSRV-2017-014] [CWE-321] A hard-coded crypographic key was used.
- [MSRV-2017-015] [CWE-798] Engineering troubleshooting shortcut with predefined common string.
- [MSRV-2017-016] [CWE-120] Abnormal device operations.
- [MSRV-2017-017] Confidential information can be transmitted using clear text.
- [MSRV-2017-018] [CWE-521] Weak password policy.
- [MSRV-2017-019] [CWE-200] Information was available before a user logged in.
- [MSRV-2017-020][CVE-2017-13703] The input parameter length of web cookies (session, account, password) was not checked.
- [MSRV-2017-021][CVE-2017-13702] Old cookie was reused.
- [MSRV-2017-022][CVE-2017-13700] XSS (Cross-site Scripting) attack.
- [MSRV-2017-023] Confidential information could be disclosed.
- [MSRV-2017-024] [CVE-2017-13698] Public and private key can be extracted from the firmware



# binary.

- [MSRV-2017-026] [CWE-327] A broken or risky cryptographic algorithm was used.
  [MSRV-2019-001] Devices in default mode shared one hard-coded root CA certificate.
- [MSRV-2019-002] XSS (Cross-site Scripting) attack.

## **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-408A-PN, EDS-408A-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**



Version: v3.7 Build: Build\_17031513

Release Date: N/A

#### **Applicable Products**

EDS-408A-PN, EDS-408A-PN-T

### **Supported Operating Systems**

N/A

#### **New Features**

N/A

#### **Enhancements**

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

# **Bugs Fixed**

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

#### Changes

N/A

#### **Notes**



Version: v3.2 Build: Build\_14121010

Release Date: N/A

## **Applicable Products**

EDS-408A-PN, EDS-408A-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**



Version: v3.1 Build: N/A

Release Date: N/A

# **Applicable Products**

EDS-408A-PN, EDS-408A-PN-T

# **Supported Operating Systems**

N/A

### **New Features**

• First release for the EDS-408A-PN Series.

## **Enhancements**

N/A

**Bugs Fixed** 

N/A

Changes

N/A

**Notes**