## Firmware for EDS-510A Series Release Notes

<table>
<thead>
<tr>
<th>Version:</th>
<th>v3.12</th>
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<tr>
<td>Build:</td>
<td>24012607</td>
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<tr>
<td>Release Date:</td>
<td>Feb 07, 2024</td>
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### Applicable Products
- EDS-510A Series

### 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
**Supported Operating Systems**
EDS-510A Series

**New Features**
N/A

**Enhancements**
N/A

**Bugs Fixed**
- Some device LEDs behave incorrectly.

**Changes**
N/A

**Notes**
N/A
Applicable Products
EDS-510A Series

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-2022-40224] 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).
• Changed the displayed name of the RADIUS authentication mechanism from EAP-MD5 to PAP.

Notes
N/A
**Applicable Products**
EDS-510A 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.

**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 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.
- If Turbo Chain is enabled and the Rate Limit function is configured on the Head Port, the Turbo Chain would become unstable.
- 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 Rate Limit – Port Disable mode does not work properly for Gigabit ports.
- Establishing an SSH connection may cause the system to reboot.
• [MSRV-2017-020][CVE-2017-13703] Buffer overflow in the session ID.
• [MSRV-2017-026] Use of a broken or unsecure cryptographic algorithm.
• [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.
Applicable Products

Supported Operating Systems
N/A

New Features
N/A

Enhancements
- Add warning message when default password was not changed
- Encrypt security Keys in user interface
- Enhance RSTP compatibility

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 due to SNMP get bulk.
- Specific CLI command cause switch reboot with default settings.
- Add a new VLAN will change IGMP querier state from disable to enable.
- Saving configuration to ABC-01 cannot be performed via IE browser.
- Rate limit cannot be set in web UI.
- Telnet hangs after SSH disabled.
- Correct RSTP edge definition in exported configuration file.
- Correct authorization of Radius/TACACS+ login.
- Correct RSTP Auto-Edge behavior.
- After upgrade firmware, the system maybe warm start when the user login the switch.

Changes
N/A

Notes
N/A
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**Applicable Products**

**Supported Operating Systems**
N/A

**New Features**
N/A

**Enhancements**
N/A

**Bugs Fixed**
- Web user interface displayed errors under Java 8 environment.

**Changes**
N/A

**Notes**
N/A
**Supported Operating Systems**
N/A

**Enhancements**
- Added web interface for loop-protection enable/disable.
- Added web interface for SSH/SSL key generation.
- Added SNMP MIB for SFP DDM (Diagnostics).
- Added web interface/CLI/SNMP for NTP/SNTP client settings.

**Bugs Fixed**
- Login failed in CLI mode when password contained special characters.
- Hybrid VLAN lacks SNMP MIB object.
- IEEE 1588 PTP did not function correctly.
- Configuration import was restricted if the system name was too long.
- Login authentication failed if the radius server did not support privilege levels assignment.
- DIP switch “Coupler” On/Off malfunction.
- SFP DDM (Diagnostics) displayed inaccurate values.

**Changes**
N/A

**Notes**
N/A
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**Applicable Products**

**Supported Operating Systems**
N/A

**New Features**
N/A

**Enhancements**
- Passed ODVA EtherNet/IP certificate.
- Added some minor SNMP OIDs.
- Enhanced multicast performance.
- Added version number in MIB file.

**Bugs Fixed**
- NTP did not synchronize time in default settings.
- NTP client function did not work with Windows XP NTP server.
- Failed to upgrade firmware when IEEE 802.1x was enabled.
- Switch rebooted when receiving IGMP v3 packets (commonly used in Windows 7).

**Changes**
N/A

**Notes**
N/A
Supported Operating Systems
N/A

Applicable Products

New Features
- MSTP.
- NTP Server/Client.
- IEEE 1588 PTP V2.
- RADIUS and TACACS+ for user login authentication.
- RADIUS for 802.1x port authentication.
- Hybrid VLAN.
- Command Line Interface.
- EtherNet/IP.
- Egress rate limit.
- Unknown unicast filtering.
- CPU loading monitoring.
- Change IP without reboot.
- DHCP Discover retry configuration.
- GARP timer adjustment.
- Loop-protection.
- Link Fault Shutdown (Disable mode in “Rate Limit” function).

Enhancements
N/A

Bugs Fixed
N/A

Changes
N/A

Notes
N/A
**Applicable Products**

**Supported Operating Systems**
N/A

**New Features**
N/A

**Enhancements**
- Enhance Turbo Chain function

**Bugs Fixed**
N/A

**Changes**
N/A

**Notes**
For products with firmware prior to v2.6, users must upgrade to v2.6 before upgrading to the latest v3.X firmware.
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**Applicable Products**

**Supported Operating Systems**
N/A

**New Features**
- Supports TurboPack™ 2009 (added new functions of Turbo Chain, IPv6, Modbus/TCP, IEEE 1588 PTP, SNMP Inform, LLDP, DHCP Option 82, Firefox, and SSH).

**Enhancements**
N/A

**Bugs Fixed**
N/A

**Changes**
N/A

**Notes**
N/A
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**Applicable Products**

**Supported Operating Systems**
N/A

**New Features**
- Upgraded EDS-510A's firmware for detecting SFP time.

**Enhancements**
N/A

**Bugs Fixed**
N/A

**Changes**
N/A

**Notes**
N/A
<table>
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**Supported Operating Systems**

N/A

**New Features**

- Added IGMP Enhanced mode enabled/disabled.

**Enhancements**

N/A

**Bugs Fixed**

N/A

**Changes**

N/A

**Notes**

N/A
Applicable Products

Supported Operating Systems
N/A

New Features
• Added new Turbo Ring ("Turbo Ring V2") function.
• Added new Ring Coupling function.
• Added Daylight Saving function.

Enhancements
N/A

Bugs Fixed
N/A

Changes
N/A

Notes
N/A
Supported Operating Systems

New Features
• First release.

Enhancements
N/A

Bugs Fixed
N/A

Changes
N/A

Notes
N/A