

# Firmware for EDS-G512E Series Release Notes

Version: v6.2 Build: 20080519

Release Date: Aug 07, 2020

## **Applicable Products**

N/A

## **Supported Operating Systems**

N/A

#### **New Features**

- Supports Interface Tracking, Ping Tracking, and Logic Tracking.
- Supports many-to-many port mirroring.

#### **Enhancements**

- The CPU utilization now displays a percentage instead of 'Normal' and 'Busy'.
- Firmware upgrade processing status is displayed.
- Flash bootloader is locked to avoid miswrite.
- Email addresses can contain up to 37 characters.
- Email Mail Servers can contain up to 39 characters.
- Old version \*.ini (below v6.0) can be imported into v6.2 firmware.
- The IEEE 802.1x traffic enablement method has changed from MAC-based to port-based.
- MAB supports the IEEE 802.1x local database.
- The PROFINET system name can contain up to 240 characters.
- Added an additional encryption option and command to the web UI and CLI.

### **Bugs Fixed**

- [MSRV-2017-002][CVE-2019-6563] Predictable Session ID: Supports random salt to prevent session prediction attack of HTTP/HTTPS.
- [MSRV-2017-003][CVE-2019-6526] Encryption of sensitive data is missing: Supports encrypted Moxa service with enable/disable button on the GUI to support the communication of encrypted commands with MXconfig/MXview.
- [MSRV-2017-004][CVE-2019-6524] Improper restriction of excessive authentication attempts: Supports encrypted Moxa service with enable/disable button on the GUI to support the communication of encrypted commands with MXconfig/MXview.
- [MSRV-2017-005][CVE-2019-6559] Resource exhaustion: Supports encrypted Moxa service with enable/disable button on the GUI to support the communication of encrypted commands with MXconfig/MXview.
- [MSRV-2019-006] Denial of Service by PROFINET DCE-RPC Endpoint discovery packets.
- Enhanced SSH with secure key exchange algorithm, Diffie-Hellman Group 14.
- Improved random distribution of TCP Initial Sequence Number (ISN) values.
- The device would restart due to memory leak during the Nmap (a freeware that can scan the available ports) scanning test.
- Broadcast storm protection threshold changed from fps to kfps.
- RSTP Port Status error with Modbus TCP.
- IGMP Snooping issue while DSCP RW was enabled.
- Trunk port was not shown correctly in the LLDP table.
- The error with the Master LED indicator.
- The head switch of Turbo Chain was blocked when connecting to a Cisco switch.
- SNMP v3 memory leak.
- 10/100M and 1000M LED display incorrectly when connecting to the network interface card with



#### Intel 82751.

- The device rebooted when performing a Nessus basic scan.
- MAC authentication bypass with RADIUS re-authentication.
- When SNMP pooled every 10 seconds, the system would perform a cold start after 25 minutes.
- Unable to get a DHCP address.
- The LLDP Table hung up in a serial console.
- Packet flooding from MGMT VLAN to redundancy port PVID VLAN.
- CERT could not be imported.
- Error with Turbo Ring v2 and port trunk LLDP display, recovery time and log miswrite.
- Relay warning caused fault LED indicator to malfunction.
- Relay warning did not work properly after the system rebooted.
- RSTP was not activated correctly through the configuration file import.
- Incorrect value for IGMP Query Interval on the exported configuration file.
- Logging in to the web console failed if authentication with local RADIUS and account lockout were both enabled at the same time.
- Turbo Ring v2 looped when too many slaves in the ring were powered on at the same time.
- The EDS-G500E Series automatically performed a cold start when receiving specific SNMPv3 packets.
- The default priority of IEEE 802.1p did not work.
- The topology of Turbo Chain continuously changed because multicast storm protection was enabled.
- The IP-based multicast control packet was blocked from entering the CPU interface.
- [CRM #200811300717] If a username had a capitalized letter then the user would not be able to log in using Menu mode.
- [CRM #190726273178] Unauthorized 802.1x devices could receive multicast and broadcast packets.

## **Changes**

N/A

### **Notes**

MSRV is Moxa's internal security vulnerability tracking ID.



Version: v6.1 Build: EDSG512E V6.1 Build 20010618

Release Date: Jan 07, 2020

## **Applicable Products**

**EDS-G512E Series** 

## **Supported Operating Systems**

N/A

#### **New Features**

N/A

### **Enhancements**

- Prevents IP base multicast control packet flooding.
- [MSRV-2017-011][CVE-2019-6561] Supports "same-site" browser cookie parameters.

## **Bugs Fixed**

- Login issue with Chrome v65.
- The system rebooted when a SNMP GET had request ID=0.
- The HTTP configuration was missing after the configuration file was imported.
- When DSCP remark was enabled and the VID exceeded 64, VLAN could not be added into the IGMP table.
- When DSCP remark was enabled, the VLAN tag would be added in egress.
- VLAN tag of IP/IGMP packets would be untagged abnormally.
- QoS default priority did not work.
- [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 allowed users to perform XSS attacks.
- [MSRV-2017-011][CVE-2019-6561] CSRF attacks were possible if browser cookie parameters were not correct.

## **Changes**

N/A

#### **Notes**

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



Version: v6.0 Build: 18022316

Release Date: Jan 18, 2019

### **Applicable Products**

N/A

## **Supported Operating Systems**

N/A

#### **New Features**

N/A

### **Enhancements**

- Updated OpenSSL to version v1.0.2k.
- Increased ARP table size from 100 to 5000 entries.
- Allowed 802.1X security port to also be set as a redundancy port with all redundancy functions.
- Improved ICMP response time to be within 200 ms.

### **Bugs Fixed**

- Fixed the issue that caused the device to fail when importing configuration files for different firmware to FW 5.2.
- Fixed the VLAN configuration issue on the serial console interface.
- Fixed the issue that caused the switch to duplicate IP multicast packets in disabled VLANs when IGMP Snooping was enabled.
- Fixed the issue of LLDP destination address not being correct when using trunk ports.
- Fixed Gigabit Fiber speed display issue.
- Fixed DHCP discovery fail issue.
- Fixed the issue of not being able to use Loop Prevent while RSTP is enabled.
- Fixed the link issue that occurs when the Gigabit Fiber port connects with 100M SFP and imports a configuration via CLI through that port.
- Fixed the link issue when using 100M SFP to connect with non-Moxa switches.
- Fixed the issue that causes the DHCP client to be unable to obtain an IP Address when DHCP Relay is disabled.
- Fixed the LED display error when users configure Turbo Chain to use an "even" number port as its head port.
- Fixed the looping issue that occurs when rebooting the switch using the dual homing function.

#### **Changes**

- Encrypted security keys in CLI commands
- Added support for new hardware version and backward compatibility with older hardware versions (Note: Hardware versions later than 2.0.0 only support firmware version 6.0 or later)

#### **Notes**



Version: v5.2 Build: Build 17053111.rom

Release Date: Aug 21, 2017

### **Applicable Products**

EDS-G508E, EDS-G508E-T, EDS-G512E-4GSFP, EDS-G512E-4GSFP/KC, EDS-G512E-4GSFP-T, EDS-G512E-4GSFP-T/KC, EDS-G512E-8PoE-4GSFP, EDS-G512E-8PoE-4GSFP/KC, EDS-G512E-8PoE-4GSFP-T, EDS-G516E-4GSFP-T

## **Supported Operating Systems**

N/A

#### **New Features**

- DSCP rewrite function. This feature is only available in Command Line Interface (CLI).
- Traffic rate setting in storm protection function. This feature is only available in Command Line Interface (CLI).

Important Notice: After upgrading the firmware, please reset the switch to the factory default settings and manually input the configuration settings. Users cannot import existing configuration files into firmware v5.2 due to a change in the software design.

#### **Enhancements**

• Increased Access Control List (ACL) support rules from 160 to 230 rules.

## **Bugs Fixed**

N/A

Changes

N/A

**Notes** 



Version: v5.1 Build: Build\_16072215

Release Date: N/A

### **Applicable Products**

EDS-G512E-8PoE-4GSFP, EDS-G512E-8PoE-4GSFP/KC, EDS-G512E-8PoE-4GSFP-T, EDS-G512E-8PoE-4GSFP-T/KC, EDS-G516E-4GSFP, EDS-G516E-4GSFP-T, EDS-G508E, EDS-G508E-T, EDS-G512E-4GSFP, EDS-G512E-4GSFP-T/KC

## **Supported Operating Systems**

N/A

#### **New Features**

- System Notification: Definable Successful/Failed Login notification.
- Password Policy: Password Strength can be set.
- Account Lockout Policy: Failure Threshold and Lockout Time can be set.
- Log Management: Full Log Handling.
- Remote Access Interface Enable/Disable.
- Configuration Encryption with Password.
- Supports SSL Certification Import.
- Supports MAC Authentication Bypass via RADIUS Authentication.
- MAC Address Access Control List or MAC Address Filtering.
- Protects against MAC Flooding Attack by MAC Address Sticky.
- NTP Authentication to Prevent NTP DDoS Attack.
- Login Authentication: Support Primary & Backup Database Servers (RADIUS / TACACS+ / Local Account).
- Login Authentication via RADIUS Server: Support Challenge Handshake Authentication Protocol (CHAP) Authentication Mechanism.
- RADIUS Authentication: Support EAP-MSCHAPv2 (For Windows7).
- MXview Security View Feature Support\* (with MXstudio v2.4).
- Turbo Ring v1/v2, Turbo Chain Support Port Trunking.
- Layer2 V-On.

### **Enhancements**

- CLI: Supports Multiple Sessions (up to six).
- SMTP supports Transport Layer Security (TLS) Protocol and Removes SSL v2/v3.
- SNMPv3 Traps and Informs.
- Fixed Display Issue with Java Applet.
- Fiber Check: Added Threshold Alarm.
- Static Port Lock with IVL Mode.
- Serial Number: 12 Digital S/N Display.
- When GbE Port Speed is [Auto], MDI/MDIX is [Auto] Fixed.
- Web UI/CLI Command Enhancement and Modification.

## **Bugs Fixed**

- Drown Attack.
- ICS-VU-951212 Vulnerabilities.
- Nessus Vulnerability.

### **Changes**

N/A

#### **Notes**



Version: v4.2 Build: Build 15062316

Release Date: N/A

# **Applicable Products**

EDS-G508E, EDS-G508E-T, EDS-G512E-4GSFP, EDS-G512E-4GSFP/KC, EDS-G512E-4GSFP-T, EDS-G512E-4GSFP-T/KC, EDS-G512E-8PoE-4GSFP, EDS-G512E-8PoE-4GSFP/KC, EDS-G512E-8PoE-4GSFP-T/KC, EDS-G516E-4GSFP, EDS-G516E-4GSFP-T

## **Supported Operating Systems**

N/A

#### **New Features**

• Added new Multicast Fast Forwarding mode.

### **Enhancements**

- Increased IGMP Groups to 2048 (original 256 groups).
- Improved Turbo Chain link status check mechanism at the head port.

# **Bugs Fixed**

N/A

### **Changes**

N/A

#### **Notes**



Version: v4.1 Build: Build\_15010918

Release Date: N/A

# **Applicable Products**

EDS-G508E, EDS-G508E-T, EDS-G512E-4GSFP, EDS-G512E-4GSFP/KC, EDS-G512E-4GSFP-T, EDS-G512E-4GSFP-T/KC, EDS-G512E-8PoE-4GSFP, EDS-G512E-8PoE-4GSFP/KC, EDS-G512E-8PoE-4GSFP-T/KC, EDS-G516E-4GSFP, EDS-G516E-4GSFP-T

# **Supported Operating Systems**

N/A

**New Features** 

N/A

**Enhancements** 

N/A

**Bugs Fixed** 

N/A

## **Changes**

• Web user interface display errors under Java 8 environment.

#### **Notes**



Version: v4.0 Build: Build\_13090210

Release Date: N/A

# **Applicable Products**

EDS-G508E, EDS-G508E-T, EDS-G512E-4GSFP, EDS-G512E-4GSFP/KC, EDS-G512E-4GSFP-T, EDS-G512E-4GSFP-T/KC, EDS-G512E-8PoE-4GSFP, EDS-G512E-8PoE-4GSFP/KC, EDS-G512E-8PoE-4GSFP-T/KC, EDS-G516E-4GSFP, EDS-G516E-4GSFP-T

# **Supported Operating Systems**

N/A

### **New Features**

• New release for the EDS-G500E Series.

## **Enhancements**

N/A

## **Bugs Fixed**

N/A

# **Changes**

N/A

#### **Notes**