

# Firmware for ICS-G7528A Series Release Notes

Version: v5.8

Build: 21072618

Release Date: Sep 15, 2021

# Applicable Products

N/A

**Supported Operating Systems** 

N/A

# **New Features**

N/A

# Enhancements

- The CPU utilization now displays a percentage instead of "Normal" and "Busy".
- Firmware upgrade processing status is displayed.
- Email addresses can contain up to 39 characters.
- Email Mail Servers can contain up to 39 characters.
- Enhanced SSH with secure key exchange algorithm, Diffie-Hellman Group 14.
- Improved random distribution of TCP Initial Sequence Number (ISN) values.

# **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.

• The device would restart due to memory leak during the Nmap (a freeware that can scan the available ports) scanning test.

- RSTP Port Status error with Modbus TCP.
- Trunk port was not shown correctly in the LLDP table.
- The head switch of Turbo Chain was blocked when connecting to a Cisco switch.
- SNMP v3 memory leak.
- 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.
- 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 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 into 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.
- Switch automatically performed a cold start when receiving specific SNMPv3 packets.

• [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.

• [CRM #210115312454] Trap Server Host Name cannot be set via web GUI.

• [CRM #201019305310] Incorrect SNMPV3 msgAuthoritativeEngineBoots behavior that the value will not count up after switch reboot.

• [CRM #200702298391] The relay trigger function by port traffic overload does not work.

# Changes

- The IEEE 802.1x traffic enablement method has changed from MAC-based to port-based.
- The length of the 802.1x username is increased from 32 bytes to 64 bytes.

#### Notes

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



Version: v5.7

#### Build: FWR\_ICSG7528A\_V5.

Release Date: Feb 17, 2020

#### **Applicable Products**

ICS-G7528 Series

# **Supported Operating Systems**

N/A

# **New Features**

• Supports SFP-10GLRLC-T, SFP-10GZRLC-T, SFP-10GSRLC-T, SFP-10GERLC-T SFP+ modules.

# Enhancements

• [MSRV-2017-011][CVE-2019-6561] Supports browser cookie parameters "same-site" to eliminate CSRF attacks.

# **Bugs Fixed**

• The switch failed to recognize the SFP-1GTXRJ45-T SFP module.

• [MSRV-2017-006][CVE-2019-6557] Buffer overflow vulnerabilities that may have allowed 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] A stack-based buffer overflow condition whereby the buffer that was being overwritten was allocated on the stack.

# Changes

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

#### Notes



Version: v5.6

Build: Build\_18112620

Release Date: Jan 18, 2019

# **Applicable Products**

ICS-7528A Series

# **Supported Operating Systems**

N/A

# **New Features**

N/A

# **Enhancements**

• Web GUI support web browser Chrome 65.0

# **Bugs Fixed**

• Fix abnormal display of packet counter in web GUI

# Changes

N/A

# Notes



Version: v5.4

#### Build: Build\_17081010

Release Date: Sep 04, 2017

# Applicable Products

ICS-G7528A-20GSFP-4GTXSFP-4XG-HV-HV, ICS-G7528A-4GTXSFP-4XG-HV-HV, ICS-G7528A-8GSFP-4GTXSFP-4XG-HV-HV

# **Supported Operating Systems**

N/A

# **New Features**

- System Notification: Definable Successful/Failed login notifications.
- 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.
- Support SSL certification import.
- Support MAC Authentication Bypass via RADIUS authentication.
- MAC Address Access Control List or MAC Address filtering.
- Protect 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 v2, Turbo Chain supports Port Trunking.

#### Enhancements

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

# **Bugs Fixed**

• The device received a large amount of BPDU packets on the port that did not have the RSTP function enabled, which sometimes caused the device to reboot.

• '&' character in column of switch name, switch location, switch description in system info will not show on the how page information.

#### Changes

• Rate limit add more option on ingress rate.

#### Notes



Version: v4.2	Build: Build_16112110
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**Release Date: N/A** 

# **Applicable Products**

ICS-G7528A-20GSFP-4GTXSFP-4XG-HV-HV, ICS-G7528A-4GTXSFP-4XG-HV-HV, ICS-G7528A-8GSFP-4GTXSFP-4XG-HV-HV

# **Supported Operating Systems**

N/A

#### **New Features**

N/A

#### Enhancements

• Encrypted all security passwords and keys in web user interface and command-line interface.

#### **Bugs Fixed**

N/A

#### Changes

N/A

#### Notes



Version:	v4 1	

Build: Build\_15062312

**Release Date: N/A** 

# Applicable Products

ICS-G7528A-20GSFP-4GTXSFP-4XG-HV-HV, ICS-G7528A-4GTXSFP-4XG-HV-HV, ICS-G7528A-8GSFP-4GTXSFP-4XG-HV-HV

**Supported Operating Systems** 

N/A

#### **New Features**

• Added new Multicast Fast Forwarding Mode.

#### Enhancements

- Increased IGMP Groups to 4096 (original 1000 groups).
- Improved Turbo Chain link status check mechanism at the head port.

#### **Bugs Fixed**

• Device rebooted when using CLI commands to back up device configurations to the TFTP server.

• Device rebooted when using CLI commands to change SNMP v3 data encryption keys and the length of key is over 100 characters.

#### Changes

N/A

#### Notes



Version: v4.0	Build: Build_14082811
Release Date: N/A	
Applicable Products	
ICS-G7528A-20GSFP-4GTXSFP-4XG-H <sup>v</sup> 8GSFP-4GTXSFP-4XG-HV-HV	V-HV, ICS-G7528A-4GTXSFP-4XG-HV-HV, ICS-G7528A-
Supported Operating Systems	
N/A	
New Features	
• First release for the ICS-G7528A Serie	S.
Enhancements	
N/A	
Bugs Fixed	
N/A	
Changes	
N/A	
Notes	
N/A	