



Firmware for EDR-G902 Series Release Notes

Version: v5.0	Build: Build_19010217
Release Date: Feb 01, 2019	

Applicable Products

N/A

Supported Operating Systems

N/A

New Features

- Supports VRRP LED, VPN LED, and State LED
- Supports LFP (LINK FAULT PASS-THROUGH)

Enhancements

- Upgrade openssl kit
- Modbus DPI support filtering with source/destination port number and malformed packet
- CLI support to show RIP distribution information
- CLI support to enable/disable RIP redistribution (OSPF)
- Static route support to set destination address as 0.0.0.0/0
- Change wording of System File Update-- by Remote TFTP
- Show OSPF routing table only
- User can type in "/" in the EDR model
- ", " ">", and "<" cannot be entered in the EDR model
- Event log can show through SNMP
- Through SNMP, in function "MTU Configuration", when PRP traffic is disabled, the MTU will reset to 1500
- When IPsec authentication mode is set as the Pre Share Key, users cannot leave the key empty

Bugs Fixed

- After the SSH reconnects continuously, there is a possibility that the connection will be rejected since the session is full.
- When the VRRP virtual IP is the same as the interface IP, the interface IP will be unstable.
- Even though the VRRP master configuration has been canceled, the virtual IP remains in the routing table.
- When the VRRP settings performed via CLI are not completed, the interface will show undefined.
- When the interface is link-down and set as VRRP, the VRRP will not run normally even though the interface is link-up.
- With blacklist, Modbus DPI cannot filter function code 5, 6, 8, 21, 22.
- The CLI symbol check is not consistent with the Web UI.
- Via CLI, the static route metric can be up to 256.
- When the EDR firmware fails to upgrade, the EDR model will not reboot.
- In OSPF, when the area type is changed from normal to stub or NSSA, the OSPF will not function normally.
- In OSPF, when the area type is changed from stub or NSSA to normal, the OSPF will not function normally.
- Fix CVE-2018-19667.
- When the WAN port has a SFP module, users cannot access the EDR-G902 after the system boots up.
- After system reboots, the L3 firewall name will disappear.
- In NAT, QoS, I2_filter, static route and VRRP, there is possibility that after configurations are added,

the web UI will crash.

- In the L2 policy, when all rules are deleted, users cannot add new rules.
- In the port status, the info of "media type" is wrong.
- In the L3 policy, when the filter mode is set as Source MAC Filter, users cannot type in the source MAC address.
- When changing the network mode via the CLI, if users cancel this change, the change is still valid.

Changes

- In the v2.0.0 system, web UI and CLI shows 12 digits serial number
- In static route, if the mask is set as 0.0.0.0, the destination will be set as 0.0.0.0 automatically

Notes

Remark for firmware upgrade to v5.0:

- If the configuration file uses the following symbols "<" or ">" for the Firewall/NAT/Static route functions, user cannot import this kind of configuration file in to the EDR system that uses firmware v5.0.
- When the EDR system upgrades to v5.0, the EDR will check automatically if there are any characters "<" or ">" in the name of Firewall/NAT/Static route functions. If there are, the EDR will change "<" and ">" to "_".

Version: 4.2	Build: N/A
Release Date: Jul 04, 2018	

Applicable Products

N/A

Supported Operating Systems

N/A

New Features

- Support for virtual MAC on VLAN interfaces
- Add independent names of NAT rules and Firewall rules
- Support "Source IP-MAC Binding" in layer 3 policy for IP spoofing protection
- Link Fault Pass-through for copper ports and fiber ports
- Add "Ping Track" and user-defined "Preempt Delay" for VRRP
- Support user-defined MTU size.
- Add MPPE for PPTP

Enhancements

- hash algorithm SHA-256 in OpenVPN.
- AES for SNMP v3.
- individual PSK for multiple "Site-to-Any" IPsec rules
- Remove weak algorithms and only keep below highly secured algorithms for SSH: Ciphers aes128-ctr, aes192-ctr,aes256-ctr, MACs hmac-ripemd160,hmac-sha2-256,hmac-sha2-512.
- Fix potential risk of "Web Application Vulnerable to Clickjacking"
- Support option to "Keep Certificate Management and Authentication Certificate" when resetting router to factory default
- Support user-defined interfaces for N-1 and port-forward NAT
- VPN support certificate using SHA-256 hash algorithm.
- SSL certificate security level with 2048 bit key length with SHA-256 hash algorithm.
- SHA-256 hash algorithm for encryption of login account and password in Web browser cookie

Bugs Fixed

- EDR-G900 compatibility issue with CISCO ACS Radius Server.
- Modbus filtering cannot filter "Modbus address range" correctly.
- VRRP status in CLI and MIB file are incorrect
- Firewall log displays incorrect source MAC address (00:00:00:00:00:00) in bridge mode
- Fail to import configuration of "Syslog Server"
- Incorrect display of login banner in web console
- Frame Padding is not cleared
- Can't use special character "\$" as login password.
- SSH server can't work after being reset to factory default.
- L2TP over IPsec configuration can't be imported correctly.
- IPsec connection table displays incorrect information.
- IPsec status does not show phase 1 and 2 established when L2TP client is connected.
- Users cannot clear SMTP email settings from web console.
- IPsec DPD detection fails
- Add city of the time zone settings for CLI commands.
- Support multiple local subnets and remote subnets for one IPsec tunnel
- Cannot remove the last OpenVPN client account
- CA server sometimes generate incorrect certificate
- When login as "user", some EDR-G900 settings still can be changed.
- Web console (HTTP) can't work after changing "Router Name"



- Fix system log mechanism for better memory usage
- SNMP V3 can't work after importing configuration back
- "OpenVPN Server to user configuration" works incorrectly when router's WAN interface is not a static IP
- OpenVPN configuration exporting has problem for the next importing
- Switching options between "TUN" mode and "TAP" mode causes OpenVPN work abnormally
- Cannot display multiple subnet setting in CLI
- Can't login web console after importing configuration via MXconfig
- User can't use dash "-" character in the name of static route rules in web GUI.
- NTP client does not sync time with NTP server correctly when the time gap is too large
- Cannot change router from "WAN2 Connect Mode" to WAN2 Backup Mode"

Changes

- Change default privilege of SNMP "public" community to read only.
- Support mib query of Virtual MAC for VLAN interfaces
- "Ping" function follows the routing table to the next hop and "Ping Interface" option was removed
- The default session limit of "SSH" and "Telnet" changes to 5 concurrent sessions
- Remove "Auto Routing" from "Outside Interface" options in N-1 NAT settings

Notes

N/A



Version: v4.1	Build: Build_17031313
Release Date: Mar 21, 2017	

Applicable Products

EDR-G902

Supported Operating Systems

N/A

New Features

- IEC 62443-4-2 level 2 compliant.
- Supports ifAdminStatus MIB information as device's port setting.
- Supports 1-1 NAT redundancy of the two routers by VRRP binding.
- Supports Radius CHAP authentication.
- Integration of the certificate database for IPsec, OpenVPN, and X.509.
- Improved PPPoE performance.
- Supports special characters, "0-9 a-z A-Z _@!#\$%^&*().-," as part of the account password.
- Unlock the limitation of the configuration import between standard temperature and wide temperature models.

Enhancements

N/A

Bugs Fixed

- Link-on and link-off operations of WAN port cause static route policy to disappear.
- No encryption of the password-type information in the exported configuration file.
- Web content did not display correctly in some browsers.
- Removed unused residual web pages from the system.
- "User" privilege is allowed to export configuration files.
- Time zone setting has a problem.
- Fixed SNMP OID "ifAdminStatus" status.
- "Cold start" event was sometimes not recorded in the system log.
- Changed the default settings of preemption delay from 5 seconds to 120 seconds to enhance the stability of VRRP.
- Incorrect display of device IP address in MXview when 1:1 NAT function of the router was enabled.
- Failed to access EDR's service through IPsec tunnel when port forwarding (same as EDR's service port) NAT is enabled.

Changes

N/A

Notes

N/A



Version: v3.6	Build: Build_16081017
Release Date: N/A	

Applicable Products

EDR-G902

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Optimized PPPoE performance.

Bugs Fixed

- L2TP account configuration disappeared after upgrading to v3.5.
- Password configuration mismatch after upgrading to v3.5.
- After upgrading to v3.5, users cannot log in to EDR products via web console when the password contains special characters.
- Users cannot login into EDR products via serial console and telnet console when the password contains special characters.
- Cannot downgrade to old versions (before v3.5) from firmware v3.5.
- LLDP interpretation with CISCO devices.

Changes

N/A

Notes

N/A



Version: v3.5	Build: Build_16060717
Release Date: N/A	

Applicable Products

EDR-G902

Supported Operating Systems

N/A

New Features

- Supports OpenVPN as client or server.
- Supports text-based configuration file and configuration file encryption.
- Supports OSPF routing protocol.
- Supports MXstudio V2.4.
- Supports multiple L2TP clients.
- Supports multiple login user account.
- Supports user-defined login message on the web console.
- Supports IPsec X.509 with certificate issued by authorized CA.
- Supports CSR (Certificate Signing Request).
- Supports monitoring IPsec tunnel uptime.
- Supports bi-directional 1-1 NAT for local devices that do not have gateway settings.
- Supports configurable port speed.
- Supports VPN, firewall, DOS, and system security events stored in local storage or sent to SNMP trap server, and Syslog server.

Enhancements

N/A

Bugs Fixed

- Daylight saving time configuration issue.
- "Base 1" setting did not work in Modbus filtering function.

Changes

N/A

Notes

N/A



Version: v3.4	Build: Build_15081713
Release Date: N/A	

Applicable Products

EDR-G902

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Separate PPTP and L2TP user account management.
- Extend maximum NAT rules to 350 on EDR-G903 Series.
- Changed DPD configuration from “Hold” to “Restart” in default IPsec settings.

Bugs Fixed

- System memory management was improved to solve system lockup problem by SDK upgrade.
- Improved several VRRP operational behaviors.
- During routing, the router occasionally dropped a few packets.
- When there are broadcast packets coming into the system continuously during link-up and link-down phase, traffic is possible to be blocked by MAC at 10 Mbps speed.
- When the WAN interface is down, router still send out RIP update for other VLAN interfaces which are bind on WAN.
- Simultaneously using "PING" from different consoles caused incorrect "PING Reply" result.

Changes

N/A

Notes

N/A



Version: v3.3	Build: Build_15020315
Release Date: N/A	

Applicable Products

EDR-G902

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Supports 10 Mbps speed configuration by CLI.

Bugs Fixed

- Repeated plugging the Ethernet cable in and out caused the NAT function to stop working.
- System stopped working after a long-term running with a large amount of traffic.

Changes

N/A

Notes

N/A



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

Applicable Products

EDR-G902

Supported Operating Systems

N/A

New Features

- Add "User Interface Management" to enable/disable http, https, telnet, SSH, and Moxa utility.

Enhancements

- Changed default interface to "Auto" in NAT configuration after factory default.
- Changed behavior of Modbus TCP filtering to "stateless firewall" mode.

Bugs Fixed

- "Packet Monitoring" did not display correctly with the latest JAVA version in the web console.
- "Drop Multiple Commands" in Modbus filtering did not work properly.
- Address configuration of Modbus filtering did not work properly when inputting 5-digit addresses.
- Cannot set NTP/SNTP time server correctly.

Changes

N/A

Notes

N/A



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

Applicable Products

EDR-G902

Supported Operating Systems

N/A

New Features

- Allow to configure TCP ports of user management interfaces (HTTP/HTTPS/Telnet/SSH).

Enhancements

- Changed default setting of NAT interface to “Auto”.
- Incorrect display of the configuration items in Modbus TCP filtering.
- Changed behavior of Modbus TCP filtering to stateless mode.
- Enlarge maximum firewall rules to 512 (EDR-G903) and 256 (EDR-G902).
- Enlarge maximum NAT rules up to 256 (EDR-G903) and 128 (EDR-G902).

Bugs Fixed

- Display error in the monitoring page of “Packet Monitoring”.
- Failed to enable “Drop Multiple Function” in configuration of Modbus Policy.

Changes

N/A

Notes

N/A



Version: v3.0	Build: N/A
Release Date: N/A	

Applicable Products

EDR-G902

Supported Operating Systems

N/A

New Features

- Deep Packet Inspection for Modbus TCP.
- Supports 5 VLANs per interface for NAT, Firewall Policy, RIP, and VRRP.
- Upgraded EDR-G903's maximum VPN tunnels to 100 (Max. 30 of 100 for start-in-initial mode).
- Upgraded EDR-G902's maximum VPN tunnels to 50 (Max. 15 of 100 for Start-in-initial mode).
- "Auto" mode in N-1 NAT Settings for routing packets to NAT or VPN.
- CLI of IPsec settings.
- Factory default login password changes from empty to "moxa" for higher security.

Enhancements

- Changed the default gateway to PPTP interface when it is established.
- In 1-1 NAT mode, the router can automatically choose the outgoing interface according to the routing table. (In the previous versions, the outgoing interface is assigned by users.)

Bugs Fixed

- Incorrect PWR1 and PWR2 LED displayed in the information bar of the web console.
- Cannot establish a VPN connection when setting "Encryption Algorithm" to "DES" in IPsec settings.

Changes

N/A

Notes

N/A



Version: v2.12	Build: N/A
Release Date: N/A	

Applicable Products

EDR-G902

Supported Operating Systems

N/A

New Features

N/A

Enhancements

N/A

Bugs Fixed

- Cannot save configurations after power cycle.

Changes

N/A

Notes

N/A



Version: v2.11	Build: N/A
Release Date: N/A	

Applicable Products

EDR-G902

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Removed undocumented account.
- Replaced hard-coded SSH/SSL key by dynamic-generated key.
- Supports special characters for login password.

Bugs Fixed

N/A

Changes

- Changed the default password to "moxa".

Notes

N/A



Version: v1.1	Build: N/A
Release Date: N/A	

Applicable Products

EDR-G902

Supported Operating Systems

N/A

New Features

N/A

Enhancements

- Improved concurrent session capability.
- EDR-G902 can be discovered by Moxa Ethernet Utility (EDScfgUI.exe) in Bridge mode.

Bugs Fixed

- Login password check failed by Google Chrome browser.
- NAT or LAN IP did not clear when user changed Network mode from Router mode to Bridge mode.

Changes

N/A

Notes

N/A



Version: v1.0	Build: N/A
Release Date: N/A	

Applicable Products

EDR-G902

Supported Operating Systems

N/A

New Features

- First release for the EDR-G902 Series.

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

N/A