Firmware for MGate 5109 Series Release Notes

Version: v2.5	Build: 23072412
Release Date: Jul 26, 2023	

Applicable Products

MGate 5109 Series

Supported Operating Systems

N/A

New Features

N/A

Enhancements

• Upgrades OpenSSL version to v1.1.1t.
• Upgrades SQLite version to v3.41.2.
• Enhances the Modbus RTU/ASCII Traffic Monitor mechanism to improve diagnostic capabilities.

Bugs Fixed

• DNP3 BI/BO objects not reacting to Modbus data change when the MGate acts as the DNP3 outstation and Modbus master.
• DNP3 read event response becomes invalid when the event buffer is full.
• When the digital outputs in local is set to 1 in a DNP3 packet, MGate 5109 cannot accept it.
• When the MGate receives only one character, it should activate the Modbus inter-character timer to wait for the next byte instead of immediately dropping it.
• The Web UI of MGate 5109 does not respond when the DNS server is not available.

Changes

N/A

Notes

N/A

Version: v2.4	Build: 22041217
Release Date: Apr 29, 2022	

Applicable Products

MGate 5109 Series

Supported Operating Systems

N/A

New Features

• Supports the optional configuration feature "Accept Arbitrary Host Header".
• Supports the HTTP response headers (HSTS, X-Frame-Option, X-Content-Type-Options) for security purposes

Enhancements

• Upgraded the OpenSSL version to v1.1.1l
• Upgraded the Dropbear version to 2020.81
• Upgraded the Net-SNMP version to v5.9.1

Bugs Fixed

• Fixed the issue with accessing the web console when configuring a range of BI index.
• The Analog Output object now supports 32-bit and Floating variation under DNP3 master mode
• Fixed the Modbus server function, which stopped when the system IP address changed.
• Under the MGate as DNP3 outstation and Modbus master mode, fixed the incorrect I/O data mapping for BI/BO objects.

Changes

N/A

Notes

• Before upgrading to firmware v2.4 or higher, upgrade the unit to firmware v2.3.

Version: v2.3	Build: Build 21020513
Release Date: Mar 02, 2021	

Applicable Products

N/A

Supported Operating Systems

N/A

New Features

• Supports MCC Tool.
• Added customized configuration to the status monitoring start address in Modbus RTU/ASCII slave or Modbus TCP server mode.

Enhancements

• Supports MXconfig v2.6 and MXview v3.2.
• Enhanced log table placement.
• Enhanced cipher suite.
• Upgraded SQLite version to v3.33.0.

Bugs Fixed

• Fixed the point index in the Analog Output request when the configured point index is over 255 in DNP3 master mode.
• Fixed the incorrect LED display issue.
• Fixed the issue that the system gets stuck when the IP setting begins with a zero digit.
• Fixed the command injection cybersecurity vulnerability with a built-in web console UI.
• Fixed CVE-2019-11477.
• Fixed CVE-2011-1473.
• Fixed the memory leak when receiving the wrong LLDP packets continuously.

Changes

• The default setting for the Telnet console has been disabled.
• Extended the length of the email alert username.
• Changed the default TCP/IP keep alive check timeout to 1 minute.

Notes

N/A

Version: v2.2	Build: N/A
Release Date: Apr 09, 2020	

Applicable Products

N/A

Supported Operating Systems

N/A

New Features

N/A

Enhancements

 • The objects of Analog Input and Analog Output support single-precision floating variation under DNP3 outstation mode.
• The Analog Output object supports 32-bit variation under DNP3 outstation mode.
• The Counter Event and Analog Input Event support variations with time tag under DNP3 outstation mode.
• The Static objects support start-stop qualifier code in reading the direction under DNP3 outstation mode.
• The Event objects support limited quantity qualifier code in reading the direction under DNP3 outstation mode.
• The Analog Input object supports single-precision floating-point variation under DNP3 master mode.

Bugs Fixed

• Implemented a timeout mechanism for the DNP3 TCP connection.

Changes

N/A

Notes

N/A

Version: v2.1	Build: Build 19052722
Release Date: Jul 02, 2019	

Applicable Products

MGate 5109, MGate 5109-T

Supported Operating Systems

N/A

New Features

N/A

Enhancements

• Upgraded OpenSSL version to v1.1.1b.
• Upgraded Net-SNMP version to v5.7.3.

Bugs Fixed

• The MGate as a DNP3 Master would not update the object values when receiving a package with IIN1.5=1.
• Changed initial sequence number from 0 to 1 under DNP3 Master mode.

Changes

N/A

Notes

N/A

Version: v2.0	Build: Build 18091119
Release Date: Jan 09, 2019	

Applicable Products

MGate 5109, MGate 5109-T

Supported Operating Systems

N/A

New Features

• Supports new hardware rev. v1.1.0.
• Supports Accessible IP additional restrictions.

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

N/A

Version: v1.3	Build: Build 16100717
Release Date: Nov 11, 2016	

Applicable Products

MGate 5109, MGate 5109-T

Supported Operating Systems

N/A

New Features

• When the NTP time server and DNP outstation time sync are both opened, a warning will occur.
• Added a new config item – DNP outstation time sync (enable/disable). Before, the DNP outstation had to do time sync.
• Added DNP outstation time sync events to log.

Enhancements

• Improved security of TCP sequence number.
• Improved beeper behavior in DHCP mode.
• Changed the DNP3 outstation event buffer from 100 to 1000.
• Implemented a DNP3 master auto time sync configuration to avoid the DNP master having to do a time sync each time it received IIN need time request.
• Changed auto logout range. Removed option "0"(disable).

Bugs Fixed

• AutoDetection in MB transparent page may be blocked when the window is closed.
• Counter/Frozen Counter in DNP outstation diagnose page only showed 32-bit format. Now it may show 16bit or 32bit by config.
• When using the wizard to set DNP3 config, part of the config items would be set to 0.
• Byte order between Modbus and DNP3 does not match.
• Even though the length of the Modbus master command is smaller than DNP3 outstation point, user is allowed to create a mapping between the command and the point.

Changes

N/A

Notes

N/A

Version: v1.2	Build: Build 16072111
Release Date: N/A	

Applicable Products

MGate 5109, MGate 5109-T

Supported Operating Systems

N/A

New Features

• First release.

Enhancements

N/A

Bugs Fixed

N/A

Changes

N/A

Notes

N/A