Release Notes

Smart Gateway Platform Firmware

Release 63998-20557 (1.0.13)

September 9, 2021

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Guardian Management Gateway user documentation applicable to this release

The *Guardian Management Gateway User Guide* document has been updated for this release. The *Guardian Management Gateway Command Line Interface Specification* document from the 63998-20556 (1.0.12) release remains applicable for this release.

Note

IMPORTANT: In prior releases of the SGP firmware, parity errors on the Modbus serial interfaces were ignored, so it was possible to use incorrect parity settings for the Modbus devices. Starting from this release, parity checking is enforced by the Linux kernel. Thus, if the parity setting for a Modbus serial port does not match the parity setting of the connected device, the corresponding device will not be detected after upgrading to the 63998-20557 (or newer) firmware. In this case, the parity setting needs to be adjusted to match the connected Modbus device(s).

New and changed features since release 63998-20556 (1.0.12)

1. This release includes updates to the Linux distribution that includes the following specific changes:
   - U-Boot has been modified to set the shared-override bit in the L2 cache controller to fix a cache coherence problem that might cause DMA buffer corruption
   - Linux kernel has been upgraded to v4.5.0
2. FastCGI has been enabled in the **`lighttpd`** server. HTTP2 is now disabled in the server configuration to avoid possible error “net::ERR_HTTP2_PROTOCOL_ERROR” in the Chrome browser.
3. Support for connecting to an AWS Greengrass server instead of the AWS cloud has been added.
4. Support for expressions and expression-based sensors has been added to Modbus JSON drivers.
5. In the inventory information for resources corresponding to Modbus devices with JSON drivers, the field FRU_FILE_ID in the PRODUCT_INFORMATION now contains the file name of the driver.
6. In the Modbus JSON driver description, it is now possible to define an optional VersionHistory clause with opaque contents.
7. The default parity in Modbus serial connection parameters has been changed from Odd to Even.
8. It is now possible to use currently inaccessible IP addresses while creating Modbus TCP interfaces.

9. In BACnet interface, protocol revision has been changed from 12 to 19to meet certification requirements and the current supported protocol.
10. In RedFish interface, weak ETags have been implemented. Also, extended base unit display for controls has been added including prefixes for unit display in Pascals.
11. In SNMP interface, `ctrlState` now returns zero value for write-only controls.
12. Web interface now allows uploading Modbus JSON drivers with parse warnings (such drivers were rejected in the previous versions).
13. In Web Interface, buttons for adding and removing network interfaces have been added to the "Modbus Parameters" dialog.
14. Web Interface now suggests system reboot after LDAP configuration changes since restart is not sufficient with FastCGI implemented.
15. In Web Interface, the values of parameters "Idle timeout", "Delay Before Disconnect", and "Event Log Query Poll Period" are now limited to a reasonable range.
16. In Web Interface, the "User Preferences" and "Global Settings" dialogs are now more user-friendly.
17. In Web Interface, web sessions now remain valid after the **`lighttpd`** server restart.
18. Firmware upgrades, importing/exporting configuration files and exporting log files, via a USB Flash device, are now only supported on USB 2.

Bug Fixes

1. It was not possible to use Modbus JSON drivers with the "-" character in the file name.
2. In Web Interface, external users could erroneously access the "Change Password" menu item.
3. In Web Interface, a message window could remain open after web session closure.
4. In Web Interface, LCD UI flags and debug level checkboxes in the global settings dialog could be displayed incorrectly for underprivileged users.
5. In Web Interface, upgrade failure could leave hanging inactive sessions.
6. Web Interface could trigger an error on file upload in the Chrome browser due to unnecessary debug data in HTTP response.
7. Web Interface could display login failure reason incorrectly.
8. SGP memory consumption could grow indefinitely in case the IoT provider was rejecting connections.