Release Notes

Smart Gateway Platform Firmware

Release 63998-20555 (1.0.11)

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Guardian Management Gateway user documentation applicable to this release

The *Guardian Management Gateway User Guide* and the *Guardian Management Gateway Command Line Interface Specification* document have been updated for this release.

New and changed features since release 63998-20554 (1.0.10)

1. This release includes updates to the Linux distribution that includes the following specific changes:
   - In U-Boot, the output impedance for the Ethernet 25 MHz reference clock pin was adjusted to provide a better match to the trace impedance.
   - The output impedance for the LCD output pins and the Ethernet 25 MHz reference clock was adjusted to provide a better match to the corresponding trace impedance.
   - The slew rate for the Ethernet RGMII output pins was adjusted to increase the edge rates.
   - The slew rate for the I^2C open-drain output pins was adjusted to decrease the falling edge rate.
   - In U-Boot, the CPU (i.MX 6SoloX) junction temperature threshold was increased to 95°C. The device will not boot at junction temperatures above this threshold.
   - The CPU frequency driver now uses a maximum frequency set point of 792 MHz.
   - The Linux thermal governor algorithm now sets the trip point to 100°C with 5°C hysteresis. At junction temperatures above this threshold the CPU frequency is set to 198 MHz, and is restored to a normal operating frequency once the junction temperature falls below 95°C.

   NOTE: The CPU is rated for an operating frequency of 1000 MHz at a junction temperature of 105°C.
2. Support for the **LUA** interpreter scripts has been added for expressions, including the capability to verify the scripts. The default maximum time for script execution is 30 seconds.
3. Per-threshold assertion delays have been implemented (in conformance with Redfish definition).
4. Smart Gateway Platform devices are now IoT-capable by default; the ability to disable IoT capability and remove the IoT configuration has been added to the firmware.
5. Support for separate resource-based event logs has been added.
6. Support for registering built-in sensor types with hardcoded states has been added.
7. Support for Modbus device discovery using the specific driver has been added; the specified driver name is stored in the configuration and reused if the device is extracted and reinserted.

8. Driver names of persistent Modbus resources can now be retrieved along with the list of supported Modbus drivers.
9. Modbus drivers for the Yeeka Lock 1504/1518 and Hoffman CNQD Value devices have been added.
10. In BACnet service, support for time synchronization and resource events in notifications has been added.
11. The CLI command *alarm* command can now display the cause of resource alarms.
12. The CLI command *global* command has been enhanced to manage **LUA** script parameters and the poll interval for 1-Wire devices.
13. The CLI command *drivers* command has been added to display the list of supported Modbus devices.
14. The CLI command *sensor* command can now retrieve and change per-threshold assertion delays.
15. The CLI command *sensor log* command now allows saving sensor logs to a USB flash drive or to a remote host.
16. Support for **LUA** script handling has been added to the Web interface.
17. Web interface can now recognize cooling state sensors.
18. The product home link has been changed in the Web interface.
19. The Configure IoT menu in the Web interface has been improved. It is now possible to remove existing IoT configurations. Also, “cloud” has been replaced with “IoT Infrastructure”.
20. Web interface has been enhanced to manage resource-based event logs.
21. Web interface now allows discovery of Modbus devices using the specified driver.
22. Web interface can now export sensor logs in text and CSV formats.
23. Web interface is now able to set per-threshold assertion delays even if corresponding sensor thresholds are not writable.
24. Global settings in Web interface now include the polling interval for 1-Wire devices.
25. Web interface now displays the textual description for resource alarms in the Alarm Table.
26. The web server configuration has been updated to disable weak static ciphers.

Bug Fixes

1. Assertion delays could be reset after polling timeout change for the corresponding sensor.
2. Recovery mechanism for Modbus devices could work incorrectly.
3. For Carel Modbus devices, discrete sensor states have been corrected.
4. For InRowCooler Modbus devices, register numbers have been corrected and measurement units for controls have been added.
5. For Omron Modbus devices, the starting control number has been changed from 0 to 1 and default measurement units for temperature sensor and controls have been changed from degrees Celsius to degrees Fahrenheit.
6. The CLI command *control* command could not use numeric control values larger than 0x7FFFFFFF.

7. The CLI command *sel* command could handle the starting entry index incorrectly.
8. OEM events could be displayed incorrectly in the *sel* command output.
9. Web interface could report errors in the IE 10/IE 11 browsers.
10. Web interface could poll and display the IoT state message incorrectly.
11. Web interface did not check privileges properly while accessing the Alarm Table.
12. Web interface could handle the set action on write-only controls incorrectly.
13. Web interface could disable SNMP interface incorrectly. Also, it was possible to change SNMP-specific user parameters, while SNMP interface was disabled.
14. Web interface could lose the enforced flag while changing the restricted service agreement.
15. Web interface did not display alarms in the Alarm Table from currently absent resources.
16. Web interface could work incorrectly with the Communication Log in the IE 11 and Edge browsers.
17. Web interface could report an error in browser debug console when a filter setting button was pressed in the Sensor Table.
18. Web interface could display the Sensor Table incorrectly when sensor type was entered via keyboard into the corresponding text field of the drop-down list.