

Smart Gateway Platform Firmware Release 63998-20558 (1.0.14)

November 29, 2021

nVent Schroff GmbH <u>schroff.nVent.com</u>

The details in this manual have been carefully compiled and checked.

The company cannot accept any liability for errors or misprints. The company reserves the right to amendments of technical specifications due to further development and improvement of products.

Copyright ©2021 nVent.

All rights and technical modifications reserved.



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

New and changed features since release 63998-20557 (1.0.13)

- 1. This release includes updates to the Linux distribution that includes the following specific changes:
 - The **arptables** support has been added to the Linux system for future use; it allows ARP packet filtering for better security.
 - The trip point for the updated Linux thermal governor algorithm is now set to 95°C. At junction temperatures above this threshold the CPU frequency is set to 396 MHz and if the junction temperature continues to rise it is then set to 198 MHz. When the junction temperature starts to fall the CPU frequency is increased by one step, i.e. from 396 MHz to 792 MHz (normal) or 198 MHz to 396 MHz, and if the junction temperature continues to fall it is increased from 396 MHz to 792 MHz (normal).

NOTE: The CPU is rated for an operating frequency of 1000 MHz at a junction temperature of 105°C.

- 2. The default account lock time has been set to 60 seconds after 3 failures due to security considerations.
- **3.** The *user* account has been disabled in the default configuration due to security considerations.
- 4. The *admin*, *user* and *guest* user accounts now request password change at the first successful login.
- 5. In the SNMP interface, the new variable *ctrlCachedState* has been implemented; it exposes the cached state of the corresponding control.
- 6. In the Web interface, Visual Expression Builder features can be invoked for event rules and periodic actions via the CTRL+Space key combination.
- **7.** In the Web interface, configuration loading scheme has been reworked to improve security and prevent leftover files from appearing in the Guardian file system.
- 8. Implemented support for AWS Greengrass as an IoT framework for SGP. The CLI command *system awsgreengrassconfig* has been added. The Configure IoT menu in the Web interface has been enhanced to allow setup of the AWS Greengrass IoT configuration. Also, support for the **greengrass** configuration variable in U-Boot has been added to system startup scripts to launch Greengrass software if this variable is set to **y**.



Bug Fixes

- 1. Name of a Modbus JSON-based driver in the resource information could be lost after system restart.
- 2. An underprivileged user could use expression evaluation, expression verification and role-based functions.
- 3. An underprivileged user could use actions of the "Execute Command" type in event and periodic rules to execute any CLI command with administrator privileges, including raising its own privilege level.
- 4. The default password history in PAM was displayed incorrectly.
- 5. Non-graceful removal of a TCP/Modbus device could cause long delays in case the corresponding JSON driver contained expressions and expression-based sensors.
- 6. In the Web interface, HTML tags could be used in text fields with unpredictable results.
- 7. In Web interface, multiple security issues with underprivileged access have been fixed.
- 8. In the Web interface, an inconsistency related to 'Strong Password Enable' and 'Password History Depth' checkboxes was present in the 'Password Policy' dialog.