

CCU Release Notes

For CS-OS release r4.7.0-0-gf4106abe

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2024-09-30

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1 Notifications

- After upgrade to 4.4.x it will not be possible to downgrade to a lower version, this is a security improvement.
- Support for older EVSE types than Chargestorm Connected 2 has been removed and it will not be possible to upgrade to this version.
- CGC100: need to upgrade to 3.18.X before upgrading to 4.2.X or later.

2 Version: r4.7.0

What is new?

- **CHARGESTORM® CONNECTED 3** specific:
 - **SoftAp Mode:**
 - * Wireless network now supports simultaneous AP and Client modes (AP-STA).
Users can now use the unit's access point for configuration while it stays connected to the existing Wi-Fi network, making setup and adjustments more convenient.
 - **Daisy Chaining with Dual Ethernet Ports:**
 - * Added software support for daisy chaining through dual Ethernet ports on CC3.
- **Added support for Customer Export or Import Limitation Schemes to NANOGRID™:**
 - NANOGRID™ now supports setting a maximum import limit, according to EREC G100, enhancing energy management.
- **Support for Carlo Gavazzi 540:**
 - *Users can now use the Carlo Gavazzi 540 as an external meter for NANOGRID™, expanding the options for accurate energy monitoring and management.*

What is changed?

- **Log Improvements:**
 - Improved visibility and logging of errors, such as communication timeouts and authorization key handling.
- **NANOGRID™:**
 - Fuse nodes with type "aggregatedfuse" will now more quickly reduce provided current after detecting overcurrent.

What is fixed?

- Security improvements.
- Fixed an issue where the soft reset API did not wait for reset completion before returning. Previously, users encountered a timeout error when modifying settings and attempting to save and reboot. This issue is now resolved, ensuring a smoother and error-free reset process.
- Corrected an issue where the WebUI frontend displayed incorrect values for Modbus energy meters, including incorrect units. This fix ensures that users now see accurate measurements and units.
- Fixed a bug where the commissioning state caused indefinite retries when a faulty password was entered.
- Improved parsing to support pretty-printed JSON in OCPP communications. This fix ensures more reliable communication with OCPP-compatible devices, preventing potential failures in charge point operations and data exchange.

Patched CVEs:

- CVE-2023-48795
- CVE-2023-38469
- CVE-2023-38470
- CVE-2023-38471
- CVE-2023-38472
- CVE-2023-38473
- CVE-2022-48425
- CVE-2023-1194
- CVE-2023-3777
- CVE-2023-39191
- CVE-2023-4147
- CVE-2023-45898
- CVE-2023-52457
- CVE-2023-5345
- CVE-2024-0562
- CVE-2024-26588

3 Version: r4.6.0

Date of release 2024-06-04

What is new?

- **Local Domain Accessibility via mDNS:**
 - Devices are now accessible using local domains:
 - * <hostname>.local
 - * <product-serial>.local
 - * <chargeboxidentity>.local
 - * <device-model>.local
- **Time Synchronization:**
 - Modem-connected devices can now sync time using the base station.
- **Security Enhancements:**
 - Various security improvements have been implemented.

What is changed?

- **Demo Mode:**
 - Demo mode can now be toggled via OCPP or the WebUI.
- **NANOGRID™ Optimization:**
 - Reduced mDNS network load to improve overall performance.
- **Temperature Derating:**
 - Improved temperature management by gradually lowering the current to prevent overheating.

What is fixed?

- Fixed an issue where changing the outlet configuration from the WebUI would in some cases clear the charging profiles.
- Fixed an issue that was preventing WebUI password resets.
- Fixed an issue where the charging penalty mode did not engage when the load was negative.
- Fixed an issue where the charging penalty mode was incorrectly reset.

4 Version: r4.5.1

Date of release 2024-03-27

What is fixed?

- The modem SSH access configuration parameter (interface/modem/firewall/ssh) is now applied correctly.
- Welded relay errors are now reported correctly in OCPP StatusNotifications.

5 Version: r4.5.0

Date of release 2024-03-14

What is new?

- NANOGRID™ license handling has been removed. All chargers will allow it by default.

What is changed?

- Improved modem handling and robustness
 - Dropped support for PPP-based modem connections.
 - Modem configuration parameters (wwan0/ppp0) have been simplified to a single set prefixed with 'modem'. The new parameters are called:
 - * interface/modem/pin
 - * interface/modem/apn
 - * interface/modem/apn/username
 - * interface/modem/apn/password
 - * interface/modem/apn/rat
 - * interface/modem/firewall/ssh

Legacy settings will be automatically migrated upon first boot, after that they are considered deprecated and shall not be used.

What is fixed?

- Ensure that the OCPP WebSocket reconnect attempt interval gets increased with each failed attempt (up to 10 minutes).
- Fixed an issue with "validFrom" in charging profile.
- Fixed monitoring of backend connection using websocket ping.

- Fixed a number of minor issues with the WebUI.
- Fixed issue with NANOGRID™ Equal2 scheduler where it did not assign all available capacity in certain situations.
- Improvement on integration with Ferroamp EnergyHub aimed at reducing on/off oscillation.

6 Version: r4.4.3

Date of release 2024-01-16

What is fixed?

- Restore the Local proxy functionality (broken since version r4.4.0).

7 Version: r4.4.2

Date of release 2023-12-01

What is fixed?

- Fixed issue with crashing application on misconfigured NANOGRID™.

8 Version: r4.4.1

Date of release 2023-11-24

What is fixed?

- OCCP: Fixed issue with charging profile not recurring.

9 Version: r4.4.0

Date of release 2023-11-09

What is new?

- Contactor cycle count can be read out through OCCP.
- The WebUI can now be accessed remotely.
- Firewall introduced to enhance software security.
 - SSH needs to be enabled per interface.

- WebUI needs to be enabled per interface.
- WebUI
 - Now uses the HTTPS protocol.
 - Introduced a new UI version with support for mobile devices.
- New parameter: outlet/X/contactor_cycle_count
- New parameter: interface/config/firewall/ssh
- New parameter: interface/eth/firewall/ssh
- New parameter: interface/eth/firewall/webui
- New parameter: interface/ppp0/firewall/ssh
- New parameter: interface/wlan0/firewall/ssh
- New parameter: interface/wlan0/firewall/webui
- New parameter: interface/wwan0/firewall/ssh

What is changed?

- OCPP
 - Improved OCPP handling.
 - Contactor cycle count vendor error removed
- NANOGRID™ controller overwrites station fuse rating.
- Removed the possibility of erasing device configuration in the WebUI.

What is fixed?

- Fixed broken UPS function for CGC100.
- Security improvements to the WebUI.
- Fixed an issue where the CGC500 only generated empty diagnostic files
- OCPP
 - Fixed an issue where overcurrent/penalty showed the wrong charging state in logs and OCPP StatusNotification.
 - Fixed an issue where SecurityEventNotification did not comply with the OCPP1.6 specification.
 - Fixed an issue where a newly received TxDefaultProfile did not execute if the start time had already passed.

- NANOGRID™
 - Clients will now apply the correct fallback current at system startup if the controller is unavailable.

10 Version: r4.3.2

Date of release 2023-10-04

What is fixed?

- NANOGRID™
 - NANOGRID™ clients will now apply the correct fallback current at system startup, if the NANOGRID™ controller is not available.
- WebUI:
 - Fixed issue in WebUI where configuration fields got wrong edit rules (introduced in r4.3.1).

11 Version: r4.3.1

Date of release 2023-07-07

What is new?

- New parameter: TransmitSecurityEvents (replaces TransmitAllSecurityEvents)

What is changed?

- Changed upstream fuse to an editable field instead of selector to allow higher fuse values.
- NANOGRID™ controller overwrites station fuse rating.
- Parameter TransmitAllSecurityEvents is removed.

What is fixed?

- NANOGRID™
 - Looping between SuspendedEVSE and Charging in NANOGRID™ Home.
 - Equal2 with CGC100 / 500 will not start charging on chargers.
 - Fallback was not assigned directly after network loss.

12 Version: r4.3.0

Date of release 2023-06-22

What is new?

- Support for secure communication in NANOGRID™
- OCPP
 - Improved support for ChargingProfile
- New parameter: LogLevel. Default: info
- New parameter: NanoGridControllerSecurity
- New parameter: NanoGridClientPresharedKey

What is changed?

- EVSE does not discard cached sessions with invalid timestamp on system startup.

What is fixed?

- NANOGRID™
 - Fixed stability issues in SFB scheduler.
 - Fixed scheduling of complex sites in EQUAL2 scheduler.

13 Version: r4.2.1

Date of release 2023-06-07

What is fixed?

- Fix modem connection issue introduced in r4.2.0
- Fix viewing meter values in web gui.
- Fix issue with user interface LEDs being dark until reboot after configuration change.

14 Version: r4.2.0

Date of release 2023-05-22

What is new?

- Support for changeable password in WebUI
- Added security log functionality.
- Support for tampering detection.
- Brute force detection.
- Security log.
- OCPP
 - Support for SecurityEventNotification
- New parameter: TransmitAllSecurityEvents
- New parameter: tampering_enabled
- New parameter: platform/hwfeatures/tampering

What is changed?

- Yocto uplift to latest patch release on Dunfell 2020-04.24-dunfell(3.1.24)
- Uplift to QT: 6.2
- Restructured CS-OS for improved security.
- Disable SSH access by default.

What is fixed?

- OCPP
 - GetDiagnostics now handles startTime and StopTime correctly.
 - Respond to TriggerMessage before taking action.
 - SendLocalList.conf fix.
 - GetCompositeSchedule: respond with not implemented

15 Version: r3.18.0

Date of release 2023-04-24

What is new?

- New parameter "UnavailableWhenTxnStartNotPossible"
- New parameter "FaultedWhenTxnStartNotPossible"
- New parameter "KeepGreenPlugLitWhenUnavailable"

What is changed?

- OCU:
 - Optimization on OCU selftest to handle noncompliant EVs
- Renaming of cgc100 to better identify model.
- OCPP 1.6:
 - Fallback to non empty string for idTag (sets idTag to:Unknown)