1 Scope

This document describes the releases of the Charge Point Software delivered with the ABL Single Board Computer SBC. This software implements a smart controller for the ABL charging stations consisting of wall-boxes and charging poles. The following sections give an overview of the integrations and releases of the software.

Product names, brands, and other trademarks mentioned in this document are the property of their respective trademark holders.

2 Integrations

The software has been successfully integrated with the following operators and platforms:

- emonvia GmbH (eComplete), Germany
- ENIO GmbH (ETSWeb), Austria
- ladenetz.de Ready Plus (LISY), Germany
- chargeIT (former: Belectric Drive; LMP), Germany
- has.to.be (be.ENERGISED), Austria
- Charge Point Services (Genie), UK
- Virta Ltd., Finland
- beCharged, Belgium
- ChargeCloud GmbH, Germany
- Etrel (Ocean), Slovenia
- Last Mile Solutions (LMS), Netherlands
- Grid & Co (Gridware), Germany
- Stromnetz Hamburg (ENSO), Germany
- Polarstern GmbH; (Polaris, OCPP1.6), Germany
- Everon, Netherlands
- Test systems:
  - SteVe from RWTH Aachen
  - OCPP Stub 1.5 from OCA
  - OCPPJS experimental OCPP simulator from GIR

3 Variants

3.1 Hardware

The SBC Charge Point Software is delivered in a single variant that covers all ABL products which are enabled with an SBC for use with OCPP. The following SBCs are supported:

- SBC3
- SBC-II

3.2 Software

Each version of the SBC Charge Point Software is identified by a release label. This label is represented by the running software as well as in the update file names, as follows:

Release label: <major>.<minor>[p<patch-level>]

- Major: The major software version. Only stepped when minor numbering is maxed out or when major feature sets have been added to the software.
- Minor: The minor software version. Stepped on each new release.
- Patch level: A sub-version used for fixes to the current release. The first patch/bug-fix for a release is numbered starting at one.

Example: 1.1p3

In update file names the release label is embedded as follows:

File Name: <update-type>_<release-label>.yar

- Update type:
  - “update”: A full software update.
  - “incremental”: An incremental update, may rely on some base software version that has to be installed on the target, already. If this pre-requisite is not met, the updater routine rejects the incremental update.

Example: update_1.7.yar

4 Releases

The most recent release is listed first. Major features that have been added are listed in the release they first appear in. For information on the complete feature set refer to the integration manual. Also, for each release the resolved and the known issues are listed.

Version 1.7p2:

Date: 2021-04-06

Resolved Issues:

- OCPP WebSocket/JSON: Milliseconds in timestamps in messages (StatusNotification, MeterValues) were missing. Added milliseconds output and changed timezone from Z to +00:00.
- Too many messages about active threads in the log.
- Missing models in the catalog.
- Wrong breaker configurations in some eMC3 product descriptions.
- Provisioning issues (ABL internal): 1Vxxxx, reset provisioning data.
- Startup/connection problems with TLS and SBCs which were replaced in the field.

Notice:

- Upgrade only needed if one of the described problems is encountered or considered relevant.

Version 1.7p1:

Date: 2021-03-05

Resolved Issues:

- Web API for setting/getting limits did not work with new logical IDs.
- ABL internal provisioning did not work.

Notice:

- Systems that are fielded already need to upgrade from 1.7 to 1.7p1 only if the web API is used.

Version 1.7:

Date: 2021-02-26

Resolved Issues:

- Hangups with empty (zero byte) web-socket sessions
- Excess heartbeats while sending other messages
- Rarely occurring rounding errors of fractional decimal digits in OCPP legacy meter values (start/stop integer fields of StartTransaction/StopTransaction messages)
- Reboots caused by unplugging the LTE dongle
- Double boot notifications
- Possible mixing up of transaction IDs when starting/stopping repeatedly and fast
- Plain text logging of APN password

Features:

- Improved mutual exclusion handling at twin products: If an EV is plugged but not authorized at one connector, it will not impede starting transactions on the other connector.
- Improvements for stability and diagnostics:
  - OCPP watchdog supports more escalation steps before rebooting.
  - Web-admin stability
  - Persistent logging
  - Improved diagnostic information.
  - Reworked association of error codes and descriptions (see integration manual for new code mapping).
  - Reworked messages for connectivity problems for better understandability.
  - Reliability of bus communication
- New web administration interface:
  - Role based access control
  - Separate roles for owner, installer and resetting
  - Experimental features (not activated by default): User login using password, Support for TLS (HTTPS)
- Product catalog:
  - Introducing new representation as a list that can be filtered for the key features of the products.
  - The product configurator allows more flexibility and granularity for combination of compatible products.
- Higher efficiency of load management: Decreased per connector backoff to enable slightly faster charging.

Known Issues:

- After changing the WLAN settings (also SSID, passphrase) a hard reboot is needed to successfully reconnect.
- Booting with invalid WLAN settings (AP not found or no DHCP answer) startup may be delayed by about one minute.

Notice:

- ChargeStart/ChargeStop OCPP messages: If a meter cannot be read, now -1 will be sent as value. In prior releases this was 0.
- If OCPP heartbeats are enabled, at least once per day a heartbeat will be sent, also if other messages are exchanged, steadily. This helps keeping the system clock in sync with the backend.

Version 1.6p5:

Date: 2020-08-11

Resolved Issues:

- Web-Socket reconnect handling: In case of unresponsive backend the web-socket connection will be dropped and reliably reconnected. This also works when only requests are not responded to by the backend while it is still doing ping/pong well.
- Communication stability: Reliable sending of BootNotification and reliable starting of web-socket ping.
- Improved resilience for protocol level errors: Continue to communicate with backend instead of blocking outgoing requests. (This concerns errors labeled as “application problem”.)
- When delivering messages to backend continously for more than 7 minutes in a row, do not accidentally trigger watchdog on protocol level.

Features:

- Unified log format for WebSocket OCPP traffic.
- Asynchronous TriggerMessage for MeterValues without requesting meter signatures.

Notice:

- See notice for release 1.6p2.
- See known WLAN issues from 1.6p4.

Version 1.6p4:

Date: 2020-07-07

Resolved Issues:

- Enlarged timeout for requests on web-socket to 90 seconds. See known issues below.
- Fixed size limitation of log-rotation to be effective. This will reduce hang-ups of the application.
- Fixed issues of driver: When switching WLAN cells it did not properly reconnect.
- Corrected reporting of SuspendedEV and SuspendedEVSE in OCPP 1.6 when no energy is offered by EVSE to EV.
- Fixed un-intended connection approaches on GSM/LTE when no APN, user, and password were configured.

Features:

- WLAN using ABL WLAN USB-stick in station mode.

Known Issues:

- Hang-ups in conjunction with web-socket when JSON responses from backend do not arrive within timeout still occur. Although there is a fix for that included in this version, the fix is not yet fully effective. It only works if pings are not answered.
- After changing the WLAN settings (also SSID, passphrase) a hard reboot is needed to successfully reconnect.
- Booting with invalid WLAN settings (AP not found or no DHCP answer) startup may be delayed by about one minute.

Notice:

- See notice for release 1.6p2.

Version 1.6p3:

Date: 2020-05-28

Resolved Issues:

- Improvement of connection to backend: Protocol and transport layer connectivity follow network layer connectivitiy. Web-Socket-Connection is dropped immediately when going offline. Thus, dangling situations where application misinterprets connectivity to backend will be reduced. SOAP request handling was adapted, accordingly.
- Multiple improvements for boot loader stability: Environment partition disabled as its corruption caused hang-ups. Disable downgrade feature which is not used and potentially causing problems in conjunction LTE without hardware upgrade. Reworked update method of boot loader partitions to reduce risk of corruption.
- Stabilisation for forced reconnect for GSM: Improvement of reset management to reduce cases where forced reconnect still ends in unresponsive GSM modem.
- More accurate state display in Web-Admin regarding connectivity.
- Solved initial reporting of erroneous state (F4) during boot. Now reporting INIT vendorErrorCode.
- Diagnostic file creation: Improved log filtering speed.
- ClockAlignedMetering: Fix wrong intervals in certain cases where actual metering interval was doubled internally.

Known Issues:

- Hang-ups in conjunction with web-socket when JSON responses from backend do not arrive within timeout.

Notice:

- See notice for release 1.6p2.

Version 1.6p2:

Date: 2020-03-03

Resolved Issues:

- LTE stability: Implemented multi-level escalation strategy when there are connectivity problems: soft, and hard reset of the chipset, power-cycle the USB stick.
- Simplified escalation scheme to fixed intervals: 20 minutes for first round, 40 minutes for second round, 60 minutes for any further round; finally reboot entire system after 3 days.
- Improved display of modem information (SIM card, …) when no APN is set up.

- Implemented modem information regarding ICCID, IMSI, manufacturer, model, firmware version, serial number/IMEI for LTE USB stick.
- Fixed race-condition during restart of USB stick that caused unpredictable re-connect behaviour.
- Removed slow init flag for roaming scenarios: Not required, any more, due to improved escalation strategy.
- Boot loader stability: Keep USB unpowered when in boot loader. Switch off USB before hard reboot.
- Enlarged diagnostic timeout to ensure collecting all diagnostic data from bus manager devices.
- Fixed wrong diagnostic start date when field left empty.
- Fixed force reconnect time for GSM modem which caused reconnection every 6-7 minutes.

Known Issues:

- Misleading display in Web-Admin of connectivity states in various conditions.

Notice:

- See notice for release 1.6.
- When upgrading SBCs in old eMC3 poles with EVCC1 firmware 2.8 (hardware revisions 1 and 2 in models like 3P4400), conduct the same steps as mentioned in the notice for release 1.6.

Version 1.6p1:

Date: 2019-12-06

Features:

- Optional forced reconnect after 24 hours of connection for GSM modem to improve robustness. May be selected via web-admin.
- Improved diagnostic feature: If only the day and no time is used for start/stop time, include the whole day. Effective for web-admin and OCPP.
- Log any exceptions not handled correctly.

Resolved Issues:

- LTE stability: After USB reset or removal/re-plugging LTE USB stick connection will now be restarted.
- Improved/corrected display of connectivity state.
- Setting of TxChargingProfile fixed for local transactions.
- Web-Admin: Sporadic hang-up after longer operation with regular polls improved.
- Fixed loss of communication and sub-sequent restart when using clock aligned metering.
- Fixed race conditions when transferring signatures that rendered system to abort receiving any further responses from hardware.
- Empty backend address is handled gracefully, now. In this case, free charging has to be enabled using web-admin, explicitly.
- Using correct certificate trust store for diagnostic upload and firmware download via HTTPS.

Notice:

- See notice for release 1.6.

Version 1.6:

Date: 2019-10-24

Features:

- Support of logging gateway for german unit and measurements law. Therefore, the following adjustments in the general behaviour of the system have been adjusted:
  - Intruduction of new configuration properties for enabling transmission of signatures in MeterValues and selecting the signature granularity (separated start and stop vs. charge data record).
  - At the start of a transaction the MeterValue is now requested before the power switch is enabled to avoid inconsistencies in the billing-amount of the consumed energy.
  - Some meter models, including Gavazzi models, require time to update their register values. At the end of a transaction the last MeterValue will be read after a new 5 second delay. Thus, the StopTransaction request will be delayed.
  - If signatures for MeterValues are required the additional information will be sent as "SignedData" in the MeterValues request. (See integration manual for details.)
  - If signatures for MeterValues are required, and the signature-component or the meters are not available the connectors will be set to unavailable, internally.
  - Extended error codes in StatusNotification request for reporting logging gateway related status.
  - The logging gateway may be updated via the SBC's update mechanism. This is only performed when a dedicated logging gateway update file is supplied. Normal SBC updates do not change the software of the logging gateway.
  - Added DataTransfer method for acquisition of meter public keys.
- Added "GeneralBreaker" for undefined tripped breaker.
- Introduced a minimum value for MeterValueSampledInterval to limit the meter reading frequency for functional reasons.
- Added support for diagnostic upload via HTTP (see resolved problems) and HTTPS.
- Added support for firmware update via HTTPS.

Security Features:

- Added support for HTTP Basic Authentication over TLS/SSL.
- Prevent the possibility to downgrade the SBC software.

Resolved Issues:

- Correction of diagnostic upload method to HTTP POST with multipart message.
- Resolved issues in the handling of the format of JSON requests.
- Changed sub-protocol listing in WebSocket opening handshake. Only the protocol-version, for which the station is configured will now be listed as supported sub-protocol.
- Model catalog has been updated, corrected, and modified to improve support for external energy meters with various master variants.
- Sporadic timeouts of energy meters have been reduced.
- Improved and harmonized reconnect behavior for WebSocket connections
- Improved compatibility of various master configurations with external measurement setups: Always load drivers for external meter EM210.
- Setup default measurands for meter values according to integration manual.

Known Issues:

- For group-installations GetCompositeSchedule-Requests could fail. However, the system will not get stuck.

- The reported connectivity-state on the WebAdmin Interface may be misleading. Please also check the connectivity at your backend-interface.
- Communication timeouts to bus devices leads to increased bus traffic. This may introduce slower controlling of the setup.

Notice:

- Required step after update:
  When upgrading SBCs for Eichrecht (German law on units and measurements) installations and for installations using external meters, re-assign the master product after updating to some other model and back to the original model. This ensures a new configuration to be loaded for the installation.

Version 1.5p3:

Date: 2019-03-07

Resolved Issues:

- After a tripped breaker is reactivated, the EVCC for this side was held in state E0. This error is now fixed. After a tripped breaker the EVCC of this side will be activated again.

Version 1.5p2:

Date: 2019-02-05

Resolved Issues:

- Encrypting of old plain text passwords could lead to an error, such that the SBC won't start correctly. Resolved this issue

Version 1.5p1:

Date: 2018-12-18

- Update of product templates

Resolved Issues:

- Fixed false assignment of backend-Url if no backend is configured.

Version 1.5:

Date: 2018-12-13

- Passwords are no longer saved in plain text.
- Support of Server Name Indication (SNI) for TLS
- Support of OCPP Configuration-Key "MinimumStatusDuration"

Version 1.4p4:

Date: 2018-12-05

Resolved Issues:

- Increased buffersize of middleware for exchanging messages between middleware and the Java application. This ensures that all devices can be reported to the application.
- Group-installations without a configured backend performed spordical reboots. This was because of an incorrect handling of pending requests. Fixed handling of requests if system is offline.

Version 1.4p3:

Date: 2018-11-29

Resolved Issues:

- Reactivated slow version of modem initialization.
- Probing of all 16 possible RFID bus devices.
- Added Linux kernel patch for improving RS-485 bus handling. This resolves the EVCC2 F2 error state issue.

Version 1.4p2:

Date: 2018-11-15

Resolved Issues:

- Resolved writing problems of the barebox which sometimes led to system crash at system update.
- Reintegrated phase rotation definitions in the product templates, which have been accidentally removed in sofware version 1.4p1.
- Corrected handling of EVCC state updates. This could have led to a state where you couldn't start a transaction.

Known Issues:

- see version 1.4

Version 1.4p1:

Date: 2018-09-10

Features:

- Update of product templates

Known Issues:

- see version 1.4
- Phase rotation definitions in the product templates are accidentally dropped.

Version 1.4:

Date: 2018-08-31

Features:

- Added SBC-II as new hardware platform
- Migration of SBC3 to version 1.4
- Added support for ABL LTE dongle

- Experimental: Added support for ABL WLAN dongle
- Support of SmartCharging profile:
  - Requests: SetChargingProfile, GetCompositeSchedule, ClearChargingProfile
  - Supported profileTypes TxDefault and TxProfile (NOT ChargePointMaxProfile)
- Support of TriggerMessage
- Added in field certificate handling:
  - Ability to download Certificate Signing Requests (CSR)
  - Download of compound CSR
- Default server certificates for known backends have been incorporated.

Resolved Issues:

- Fixed issues in TransactionManager.
- Fixed issue regarding empty SOAP CP-Address
- Compliance with OCPP given restrictions to String lengths for requests

Open Points:

- Secure handling of WLAN-Passwords
- Support of SetChargingProfile with profile type ChargePointMaxprofile

Known Issues:

- The bootloader has sporadic problems when writing to flash memory. This may lead to an inoperable system when performing a system update. If this happens the system will crash during boot or later during initialization and not be recoverable.
  (Resolved with version 1.4p2.)
- The system creates sporadic communication errors on the EVCC/RFID field bus that will result in F2 errors on the EVCC2 devices.
  (Resolved with version 1.4p3.)

Version 1.3p2:

Date: 2018-04-18

Resolved issue:

- Resolved issues in experimental support of display device.

Version 1.3p1:

Date: 2018-04-18

Features:

- Added experimental support for the display device.

Version 1.3:

Date: 2018-04-10

Features:

- Support of following OCPP1.6 profiles:

- Core-Profile,
- Firmware Management,
- Local Auth List Management

- Added OCPP message transport via JSON/WebSocket for OCPP1.5 and OCPP1.6
- Encrypted transport via JSON/WebSocket (wss) including certificate handling
- Support of external meter as limit for dynamic load management
  the external meter must be from the same series like the meters in the wallboxes or poles; a combination with a meter from another series (e.g. a Gavazzi meter together with Inepro meters or vice versa) must be configured manually by the software development department; Phoenix meters cannot be combined with other meters at all
- Support of EVCC2 FW 2.5
- Support for Carlo Gavazzi Meter EM210 and EM111
- Support for one phase Inepro Meter Pro1-Mod series
- Support of GPIO subdevice for EVCC2 with firmware higher than 2.1
- Changed behaviour of triggering BootNotifications. A BootNotification is only sent at start of system. If the connection breaks during operation no BootNotification will be sent again.
- Download of diagnosis data utilizing the web-based user interface
- Reverted display order of the log message entries in the web-based user interface: newest entries are at the top now

Open points:

- Detection, whether EV is suspends or not (i.e. if it actually draws current). This is needed to resolve the OCPP1.6 state SUSPENDED_EV correctly

Important note:

- A downgrade from version 1.3 back to version 1.2 is not possible
- An upgrade from an older version (<1.3) is only possible with a full update. An incremental update from previous versions to 1.3 is not supported.

Version 1.2:

Date: 2017-12-15

Features:

- Support of ABL EVCC2 FW2.1 has been added.
- Support for Carlo-Gavazzi Meter (EM-340 series) has been added.
- Experimental support for OCPP 1.5 with JSON/WebSocket transport
- Product configurator: Installer can setup arbitraty master/slave installations and add slave products to the existing master product.
- Load-setter with externally controllable limit extended: HTTP pull supported
- Individual charge points can be controlled by remote limits (experimental)

Resolved Issues:

- Improved stability of meter reading in congestion scenarious.
- Transaction manager enabled for 16 charge points.
- Invalid URLs entered for central system do no longer break the start-up.

- Improved modem initialisation in roaming environments.
- Fixed issue that resulted in modem inactivity, details see known issues of version 0.5.

Changes:

- Syntax for controlling limits was modified, see integration manual.

Version 1.1 patch 4:

Date: 2017-10-10

Resolved issues:

- Improved offline detection and backend error handling.
- Fixed issues regarding bus-congestion when operating with more than eight charge points.
- Fixed possible exception in transaction manager startup.
- Improved robustness of background metering when a meter becomes temporarily unavailable.

Version 1.1 patch 3:

Date: 2017-09-07

Resolved issues:

- Fixed handling of unplausible meter values of Phoenix meter.
- Fixed issues after soft reboot.

Version 1.1 patch 2:

Date: 2017-08-29

Features:

- Support of EVCC FW2.9
- Introduced background metering. The meter values of Energy.Active.Import.Register (Wh) are read regulary. In case of an unreachable meter an old value is taken. This ensures, that the most recent meter readings are sent to the backend instead of unplausible values.

Resolved issues:

- Handling of unplausible metervalues.
- Cleared uncertainties of StatusNotifications concerning Breakers for eMC2 and eMC3 Poles.

Remark:

- Special issue of Version 1.1 patch 1 is still active.

Version 1.1 patch 1:

Date: 2017-08-11

Special issue:

- Temporarily set startValue of Group-Load-setter to 12A instead of 6A. 6A could cause charging issues with Renault Zoe. Please be aware of this workaround when installing a group setup and using the Group-Load-Setter.

Version 1.1:

Date: 2017-07-28

Features:

- Support of ABL EVCC2 FW2.0 has been added.
- The web administration interface and its documentation have been reworked.
- Non-fatal alarms of the outlet controllers are now also propagated to the central system.
- Load-setter with externally controllable limit (HTTP push, OCPP).
- Preliminary support of load-setter for group setups (pre-configured ex factory).
- Time span of diagnostic data upload can be parametrized, now. By default, diagnostic information of last two days up to current time is reported.

Resolved Issues:

- Further improvement of GPRS and backend connectivity and connection recovery.
- The problem with inoperable connectors has been resolved. See known issues, version 1.0.
- Breakers with sensing switches connected to GPIOs now work properly.
- Bus communication stability under steady load improved.

Version 1.0:

Date: 2017-05-23

Features:

- Support of ABL EVCC2 FW1.8 has been added.
- The behaviour after a power failure and/or in case of a broken backend connectivity can now be set more precisely (see integration manual for further details).
- Fixed minor issues of load control to prevent a possible overload.
- Support for small software updates. After updating to this version, incremental, and thus shrinked, update files can be processed by the SBC3.
- The LEDs on the SBC3 represent the overall system state (see technical setup manual for further details)
- The status of the modem is represented internally more detailed. The information shown on the web administration interface is now clearer.
- A transaction is now started as soon as the car is in state B2 or C2. In older versions a transaction was only considered as started, when the car got into state C2.
- The FreeChargingUid is configurable, now.

Resolved Issues:

- Improved transaction management in case of interrupted backend connection and/or power failures. The information about open and terminated transactions is saved in order to be sent as soon as the connectivity is stable again.
- The backend connectivity and the status of the modem are supervised in order to detect and handle connectivity problems. This improves the stability of the modem and the connectivity to the backend.
- The acquisition and transmission of meter values at start/stop and during a charging session is more stable.

Known Issues (added per version 1.1):

- Sporadically, one or both connectors stop operating (new sessions) after specific conditions and after error states. This malfunction state can be overcome by a soft-reset of the station.

Version 0.9, patch 2:

Date: 2017-02-16

Resolved Issues:

- StopTxnSampledData configuration may be set to an empty value (i.e. an empty value is not substituted by the default value).
- Corrected setting of ShortenUIDs: No system restart necessary.
- Corrected timestamp handling in StartTransaction/StopTransaction messages: A timeout in metering will not lead to unset timestamps.
- Corrected handling of frequent metering in relation to breaker detection: Error RCCB will always be raised if configured.
- Persistence of configured measurands (StopTxnSampleData, etc.) fixed.

Version 0.9, patch 1:

Date: 2017-01-11

Resolved Issues:

- Synchronous read metering problems due to electromagnetical field inference solved by adapting timeout-parametes, retry-limits and behaviour of Java-application on timeouts

Version 0.9:

Date: 2016-12-22

Features:

- Padding of 4-byte UIDs (ISO 14443) may be disabled
- Immediate charging when off-line may be enabled
- Improved provisioning of the system (ex-factory, sw-update)

Resolved Issues:

- Correct reporting of breaker failures to the backend
- Improved transaction management when off-line concerning reporting to the backend when on-line, again.

Known Issues:

- Due to stability issues we recommend before starting a software update in emH3 to change the availability of the charge point to Unavailable

Version 0.8:

Date: 2016-11-30

Features:

- Support for emH3 Twin-Box (3W2215)
- Basic load control for emH3 Twin-Box implemented
- WebAdmin: Network port for incoming OCPP connections is adjustable

Resolved Issues:

- In case of a Reset, triggered by the backend, open transactions are stopped first.

Known Issues:

- Breaker failures are not reported to the backend, correctly
- Due to stability issues we recommend before starting a software update in emH3 to change the availability of the charge point to Unavailable

Version 0.7:

Date: 2016-10-12

Resolved Issues:

- An empty or irregular internet URL address to the Central System made the Java-application hang and the WebAdmin administration page could not be accessed to change this. Now, a default URL will be loaded and put to the configuration, so that at least the administration page can be accessed in order to change the address to the Central System
- Transaction management implemented
- Hardware clock gets written, when system clock gets set (by OCPP)
- Software signing certificate has been renewed (prolonged). While the keys stay the same, the certificate that is deployed with the Java-application changes. Therefore, it is not possible to do a standard update (via WebAdmin or OCCP) from release 0.6 upwards.
- Handling of exit-status 18 of the ppp-daemon has been changed: if the modem cannot enter the mobile net, because it is not yet allowed to, the net is down, etc., the system will retry the initialization of the modem for 100 times with an exponential growing wait time between the retries for several days
- The device tree can be reset via WebAdmin and a clean probing can be performed, so no more placeholder devices will appear

Known Issues:

- Transaction management in case of broken backend connection is not robust

Version 0.6:

Edit: Post-release notes have been removed as not relevant to the customer.

Date: 2016-08-23

Resolved Issues:

- The storing process of the chargepoint.properties file is more robust now. A shutdown during the store will not erase the file any more.
- Calling of diagnosis web page of placeholder devices made the web page hung.

Known Issues:

- Transaction management is not robust against reset/update: Disable charge point and close transactions before rebooting or software update.
- There were internal problems with the software signing, these have been solved post-release.

Version 0.5: Initial Release

Date: 2016-08-05

Features:

- Single or twin charger
- Supported devices: ABL EVCC, ABL RFIDM20, and Phoenix Meter, GPRS Terminal
- Administrative web interface
- OCPP 1.5

Known Issues:

- Transaction management is not rubost against reset/update: Disable charge point and close transactions before rebooting or software update.
- Under rare circumstances (eventually caused by soft-reboots and/or modem reconnects) the system will not try to re-establish the modem connection (caused by stale lock file). A hard-reboot of the OS (for example via WebAdmin) will solve this condition. Fixed in version 1.2.

Versions 0.1 through 0.4: Internal Pre-Release Builds

These versions were used for internal testing and have not been released.