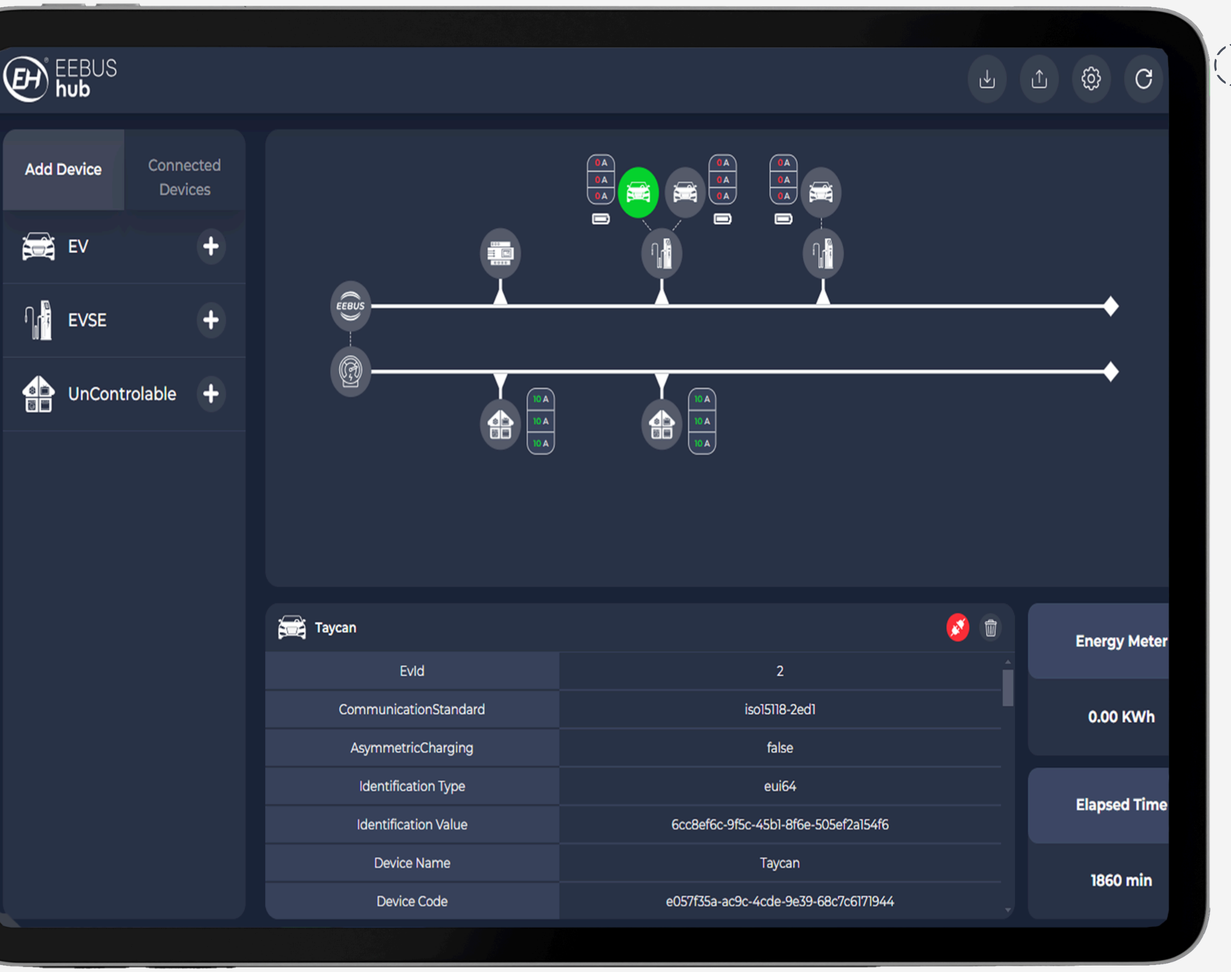
EEBUS hub

EEBUS-Hub

Your Ultimate EEBUS HiL/SiL Testing Framework

Coretech



Overview

A framework for building and testing your device's EEBUS Stack, enabling interaction with various devices.

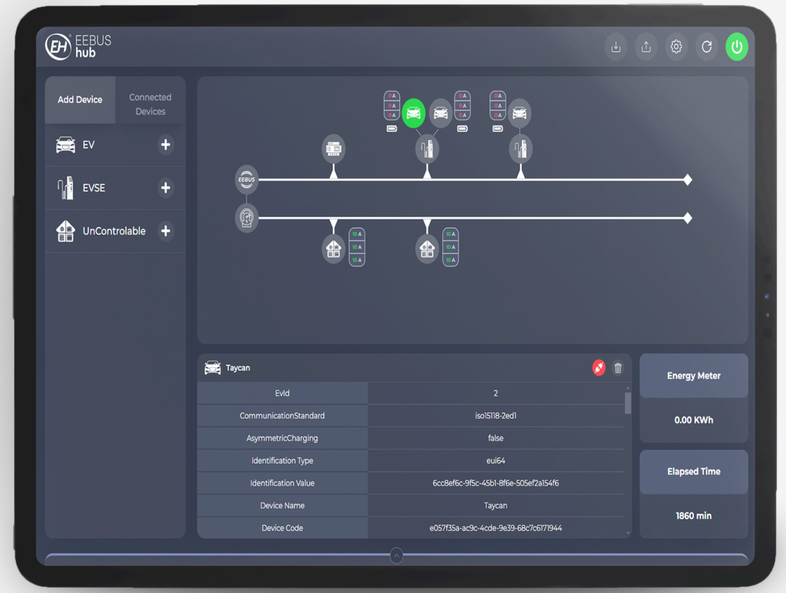
Provides APIs and a UI to control various actors participating in an EEBUS environment, such as EVs, EVSEs, HEMS, Energy Guards, and SMGWs.

The simulation allows for the integration of real devices (HiL) alongside numerous simulated devices, facilitating the testing of an EEBUS device.

Motive

EEBUS-Hub is intended to be a catalyst to integrating EEBUS stack in your device i.e

- Simulating multiple scenarios without the need of **any external hardware**
- Integrating conformance test suites in your **CICD Pipelines**
- Providing **EEBUS Compiance Testing** Comprehensive packages



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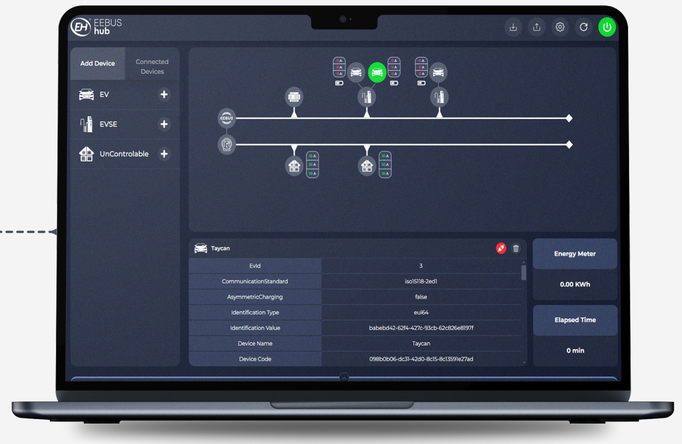
Supported Devices

EEBUS-Hub Supports the following devices:

- EVs
- EVSE
- CEM/ HEMS
- Home Fuse Limits & Available Grid Feed Power
- SMGW
- Uncontrollable Devices



*More devices will be added in the future

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Hardware in the Loop Support

DUT

EEBUS-Hub Supports plugging real hardware into the simulation so that you can test your device interaction with other devices over different use cases and scenarios.

E.g. You can either plug your own CEM or EVSE into the simulation

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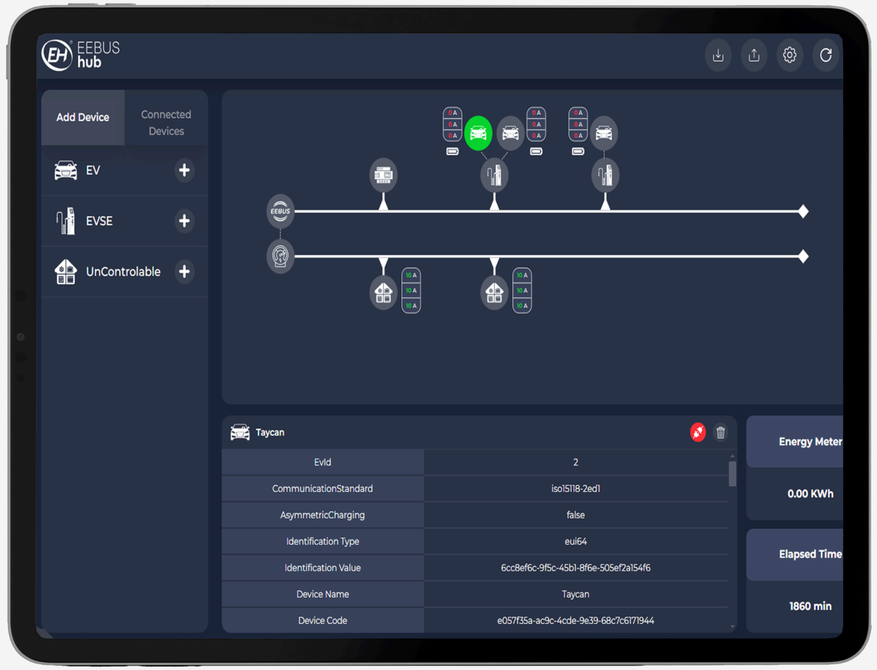
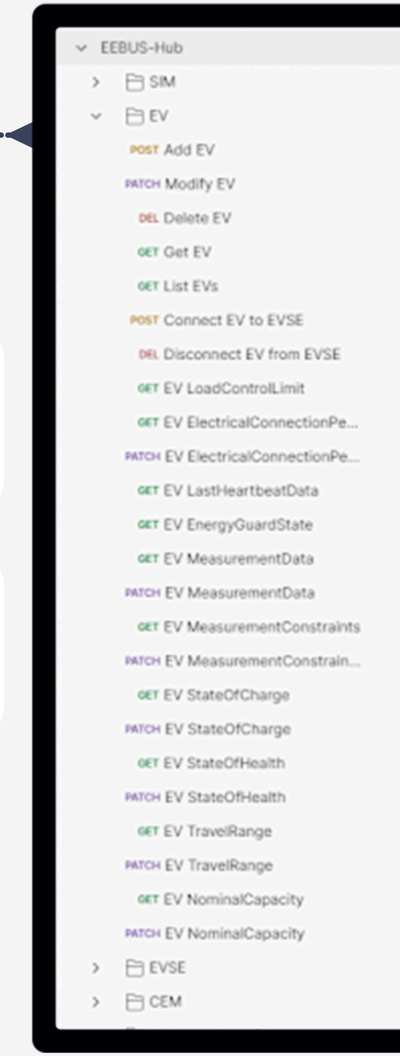
Built for CICD



OPEV for CEM device is currently supported and more scenarios/devices are under development currently.

Scenarios could be designed using **UI** or using **API base approach**

EEBUS has **Conformance and compliance testing** against EEBUS standards to ensure your device compliance



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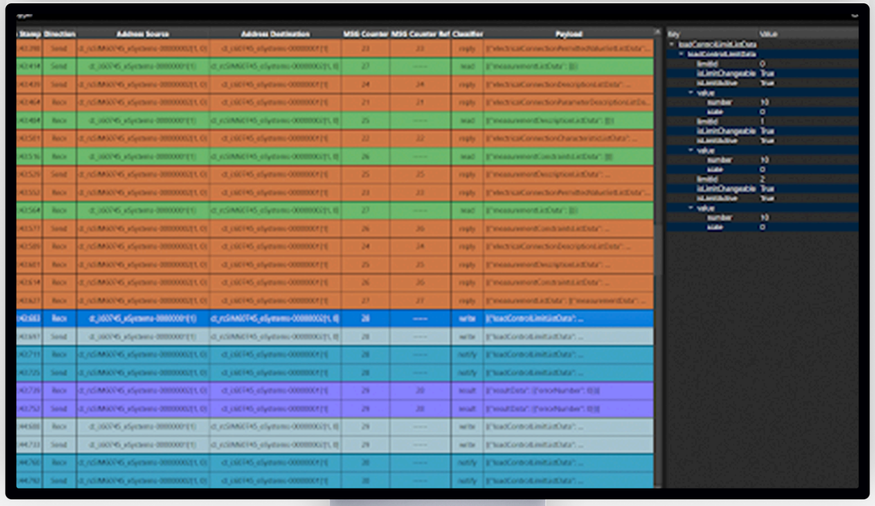
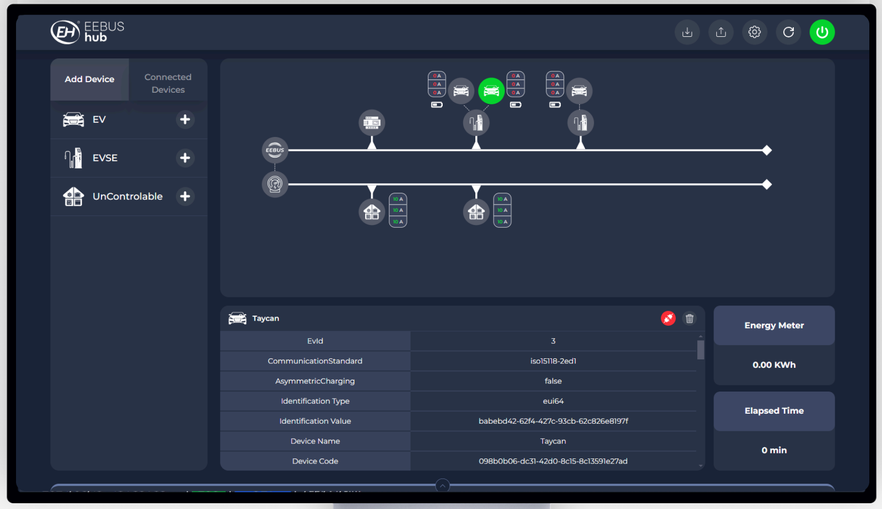
EEBUS Messages Logging

Supports logging EEBUS messages so that you can catch debug your system interactions easily.

Logs could be dumped to csv files or it could be visualized using EEBUS-Hub Viewer.





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Supported EEBUS Use Cases

E-Mobility

- Overload Protection by EV Charging Curtailment
- EVSE Commissioning and Configuration
- EV State of Charge
- EV Charging Electricity Measurement
- EV Comissioning and Configuration

Grid

- Limitation of Power Consumption
- Monitoring of Grid Connection Point
- Limitation of Power Production
- Monitoring of Power Consumption

Fully Supported Partially Supported

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Summary

SiL
Framework to build a full EEBUS setup without the need of any external hardware

UI
Additional UI to facilitate simulation scenario design

Plug & Play
For real hardware insertion in the environment (HiL)

Configurable
off the shelf electrical devices with EEBUS interface (EV,EVSE,CEM,SMGW,.....)

Free Licence
Binary is licensed under GPLv2

Compliance test suite
to ensure a device is compliant with the EEBUS standard

APIs
APIs to add, remove, configure or query the simulation environment

EEBUS
EEBUS messages Logging

Applications

CICD

HiL Testing

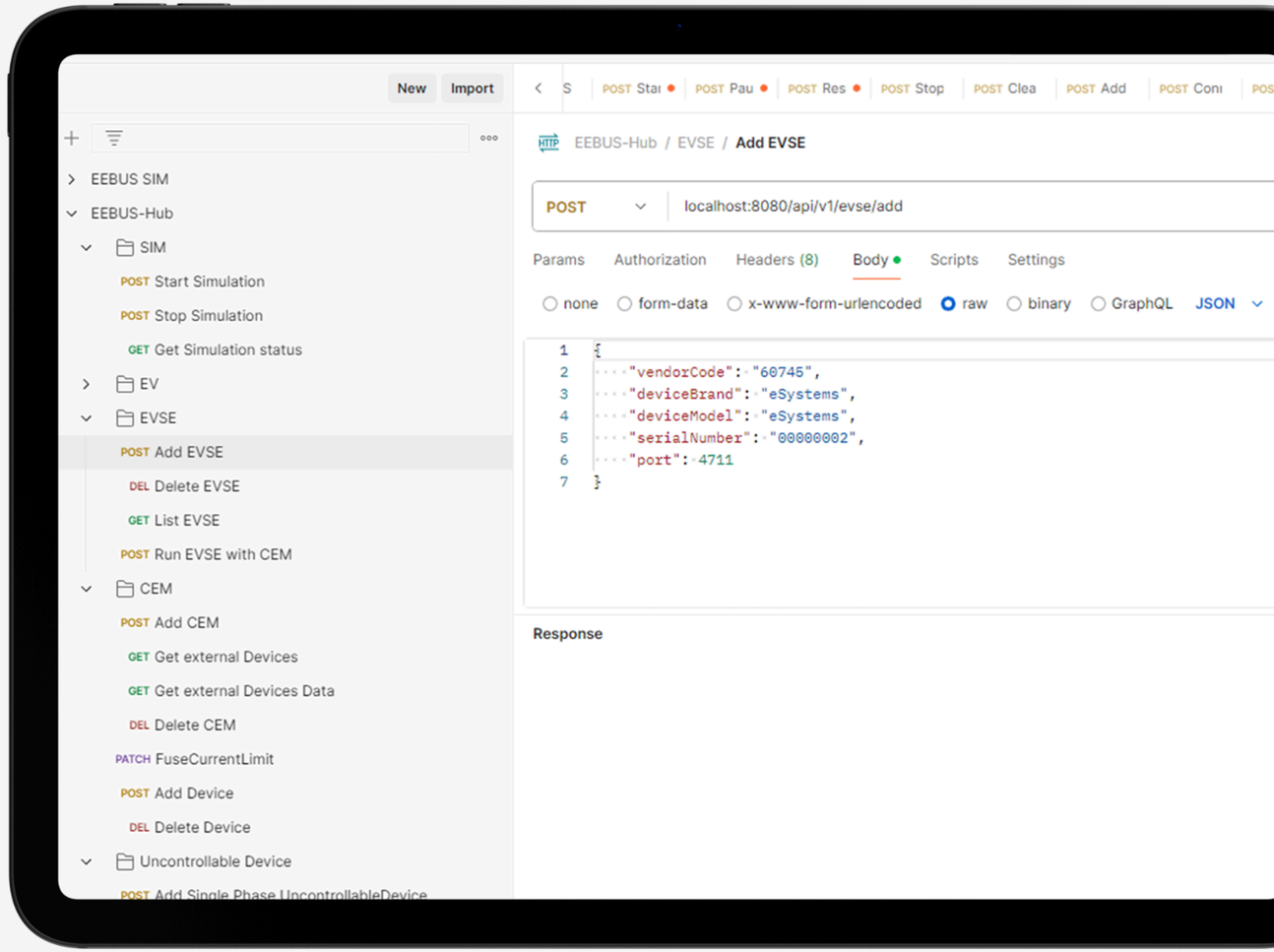
Rapid Prototyping - SiL

EEBUS Compliance Testing

APIs

EEBus-Hub is programming language agnostic as all control is performed via APIs

In the future an SDK will be supplied for this API over Python and GO, but for now using the API makes the simulator very accessible.



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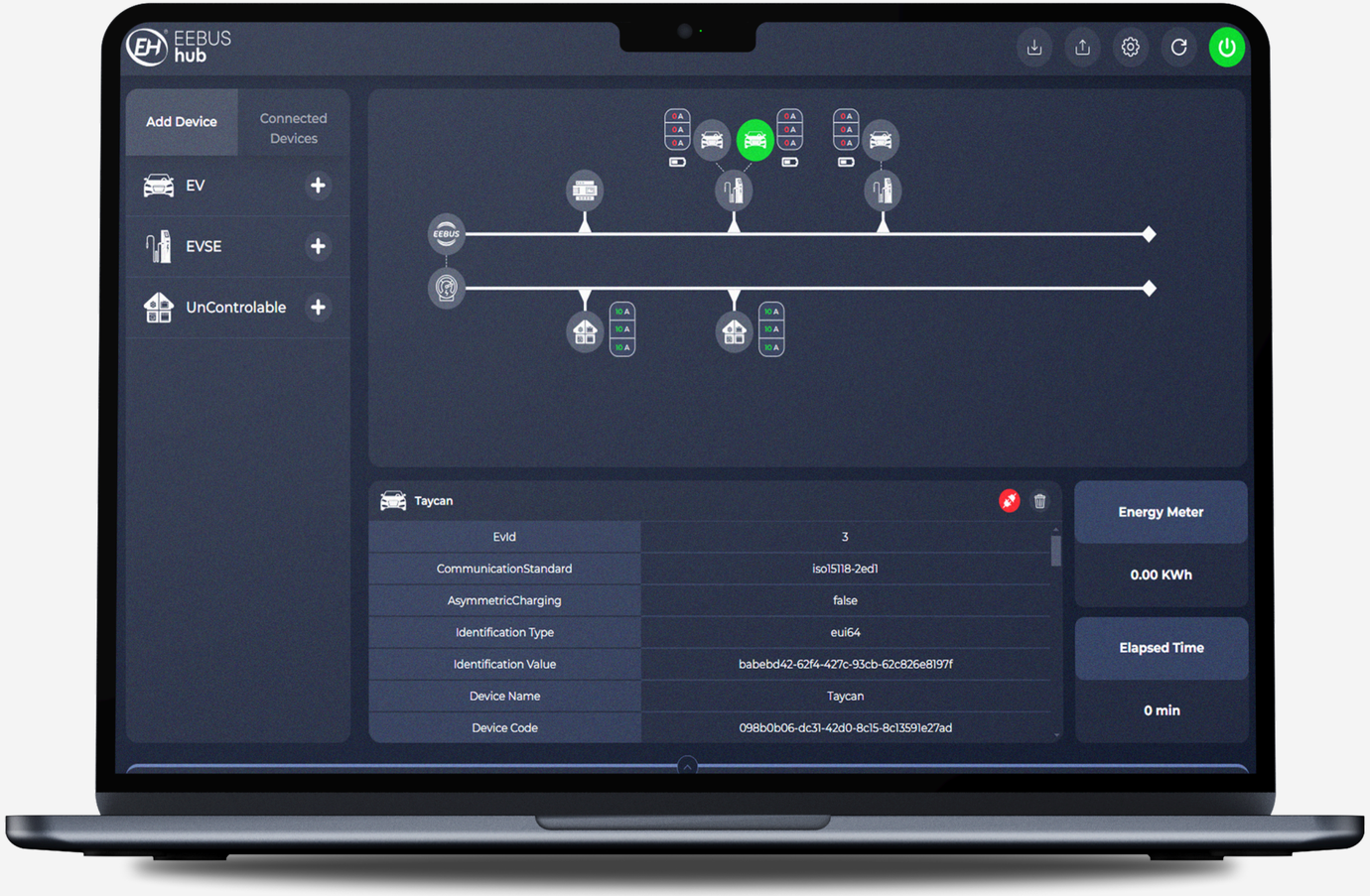
UI Interface



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How Can We Help You with your EEBUS Product?

EEBUS Stack Integration Support

CICD Pipelines Setup

EEBUS Compliance Testing

Tooling & Automation

Training & Consultation

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