

EVCE

SmartConnector Extension

Introduction

The EVCE Smart Connector interface is a middleware application that enables communication between EVCE REST API service with EcoStruxure Building Operation via EcoStruxure Web Services (EWS). The EVCE Smart Connector Interface communicates with EcoStruxure Building Operation to SET the Zone Reduction and Validity for each Zone and SET the availability of the Connector.

Features and Benefits

- Supports EVCE REST API v6.
- Communicates with EVCE to fetch the charging zones, stations, and connectors details.
- Creates History Items to log the active energy, total active power and average rms current at the station and zone levels.
- Alarms are created to capture the charging connectors status.
- Send commands to EVCE to manage the availability of the charging station and set the zone reduction.
- Supports SmartConnector Service version 2.5.5.40 or greater.
- Supports EBO versions 3.2 onwards.

Supported Operating Systems

The following is a list of Operating Systems which the SmartConnector framework has been tested against. Non-listed operating systems capable of running .NET 4.5 should also work but their compatibility has not been verified.

- Windows 10 64 bit.
- Windows Server 2016 64 bit.
- Windows Server 2019 64 bit.
- Windows Server 2022 64 bit.

The screenshot displays the EVCE SmartConnector interface. At the top, it shows the Station Friendly Name as 'ProAC - A22352020149' and the Station Connected status as 'Connected'. Below this, the Connector 1 Status is 'Available', accompanied by an image of the physical connector. The Energy usage is shown as '0 kWh' and the Power usage as '0 kW'. The main section is titled 'Zone 2' (EV Zone Id 2) and contains two tables: 'Zone Information' and 'Zone Power Monitoring'.

Zone Information		Zone Power Monitoring	
Number of Stations	1	Active Power Phase 1 (L1)	0.00 kW
Number of Connectors	1	Active Power Phase 2 (L2)	0.00 kW
Number of Transactions	0	Active Power Phase 3 (L3)	0.00 kW
Zone Type	static	Active Power Total	0.00 kW
Zone Current Setpoint	32.00 A	RMS Current Phase 1 (L1)	0.00 A
Zone Max Current	32.00 A	RMS Current Phase 2 (L2)	0.00 A
Overall Station Current Setpoint	0.00 A	RMS Current Phase 3 (L3)	0.00 A
Zone Power Setpoint	22.00 kW	RMS Current Average	0.00 A
Zone Reduction Active	False		

Supported Database Servers

The following is a list of Microsoft SQL Servers which SmartConnector has been tested against. Non-listed servers compliant with Microsoft SQL Server may also work but their compatibility is not guaranteed.

- Local DB.
- Microsoft SQL Server 2012 Express or greater.
- Microsoft SQL Server 2012 or greater.