# ELECTRIC VEHICLE CENTRAL INTELLIGENCE

#### Electric Vehicle Central Intelligence (EVCI) 🗹 Monitors

- the health of the Charging Station equipment
- $\ensuremath{\boxtimes}$  Activates and terminates charging events
- ☑ Initiates pay as you go transactions
- Collects usage data from charging stations.

No matter what your business, there's a cloud plan that will make your charging solution deployment successful.



### WIDELY USED FEATURES

#### OCPP 1.6 COMPLIANT NETWORK

enables you to add any OCPP 1.6 and above compliant charging stations to the network & start monitoring its activities.

#### POWER MANAGEMENT (AUTOMATED DEMAND RESPONSE) SOFTWARE

reduces station installation costs, lowers ongoing electricity costs, and lets you charge more vehicles.

#### SMART PRICING & PAYMENT SYSTEM

pricing based on energy cost, duration, time of use, session length, or driver group. Electronically transfer collected funds to designated bank account. Supports Multiple DIgital Payment gateways.

## ONE CLICK STATISTICS & ANALYTICS

Statistical charts & analytics, available with a click, summarize important trends for planning and management reporting.

#### ADVANCED ACCESS CONTROLS

manage which drivers can access stations and when.

#### WAITLIST

conveniently notifies & hold a spot for drivers when a charging spot becomes available.

#### EASY CHARGING FOR FLEETS

Integration with fleet fuel cards, telematics & asset management systems simplifies EV charging for fleets.

### KEY POINTS

Solution is vendor agnostic

Front facing Web Portal

Mobile Application for Best Driver Experience

OCPP Compliant

Remote troubleshooting

Remediation of EVSE

# CENTRALIZED WEB PORTAL

#### View Station Information, Including Station Availability and Accessibility Time

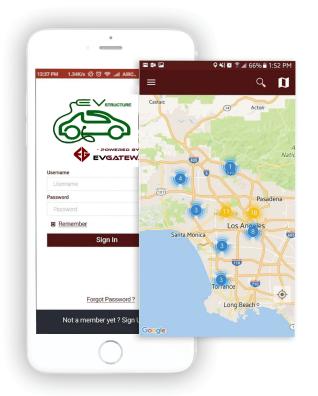
EV drivers will be able to locate EV charging stations, get step by-step directions, determine the charger type (Single or DualLevel Port), and view real-time station status (available, in use, etc.) in our new Advanced dashboards.

#### Set Notifications, and Review EV Charging Session Details

Our Network allows drivers to create driver accounts, and login to review their charging session details, payments, Edit their profiles etc. Multiple Methods for Activating EV Chargers and Charging Sessions. Our Network allows drivers to activate EV charging stations via activated FOB ID guest code, Mobile Application or Customer Support which is available 24 X 7. EV charging sessions can also be started directly from the mobile application or by Customer Support specialist.

## Single station group (usage policy and pricing are uniform across all stations)

#### **User Based Access Level Controls**



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# **MOBILE APPLICATION**

#### Locate Public Electric Vehicle Chargers

Search, sort, filter, and view public electric vehicle (EV) charging stations on our Charging Network in a map

#### View EV Charger Information & Status

View EV charging station information, including address, realtime status, number of EV chargers and charge type, applicable hours, and directions to location and Station.

#### Notify When Available

When a station that is currently busy becomes available, members can receive a push notification.

#### Start an EV Charging Session

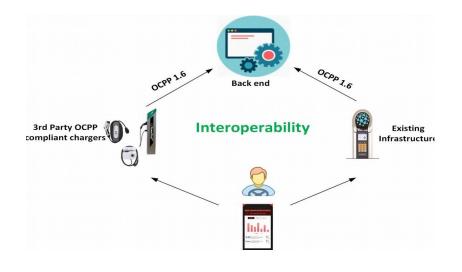
Once a driver locates and selects the EV charging station in the Mobile app, drivers have the ability to start an EV charging session directly from the app

#### View & Receive Charging Status Updates

Become a member, access and edit your account, including your profile, billing, FOB ID's, and charging status notifications and define default charging locator Settings

#### Support

Report a station issue directly from the Mobile app with the ability to provide a description and pictures. Our Customer Support Team is Available 24 X 7.



# OCPP CORE **FUNCTIONALITIES**

#### **Functionalities Initiated from Charging Station**

- Authorize
- Meter Values
- Boot Notification
- Start Transaction Status Notification
- Heartbeat

#### **Functionalities Initiated by** the Central Server

Station Id:

Reset Type

Station ID:

Status

Response Confirmation

- · Change Availability
- · Change Configuration

4455

Hard

4455

- · Data transfer Get Configuration
- Remote Start
- Transaction

OCPP Information

Remote Start Transaction

Remote Stop Transaction

Change Availability

Unlock Connector

Get Configuration

Change Configuration

Reset

Clear Cache

# **OCPP SECURITY**

At public charge spots drivers authenticate themselves using an RFID card. Surprisingly, only the static ID (the so-called UID) of the card is used for authentication here. This means every customer is identified through a password that is transmitted plaintext through the air. This makes copying the cards extremely simple: on legitimate RFID cards the UID is fixed and cannot be changed, but counterfeit cards with a configurable UID and equipment that can spoof the RFID communication are readily available.

For this reason, we have made the transactions keyless (without RFID), a driver can use our Mobile App or can just enter their Registered cell phone number to initiate Transactions. Using QR reader, we eliminated the Use of RFID where a Driver can install the Mobile App, run it and scan the QR code displayed on the EV charging Station.

# **OPEN** CHARGE STATION PROTOCOL

OCPP is simply a syntax (language) used to communicate between a networked

charging station and a network management system Open Charge Station Protocol (OCPP) was defined by an informal group known as the OCPP Forum led by two companies from the Netherlands.

- The OCPP Forum has over 50 members. Our network has been an active member of the OCPP Compliant network
- EVCI is OCPP 1.6 compliant

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Station List

Manage Stations

Live Status Station/ Port

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• OCPP has evolved over the last 5 years from its initial release to Version 1.2, stations, and then to the current Version, 1.6

 Remote Stop Transaction

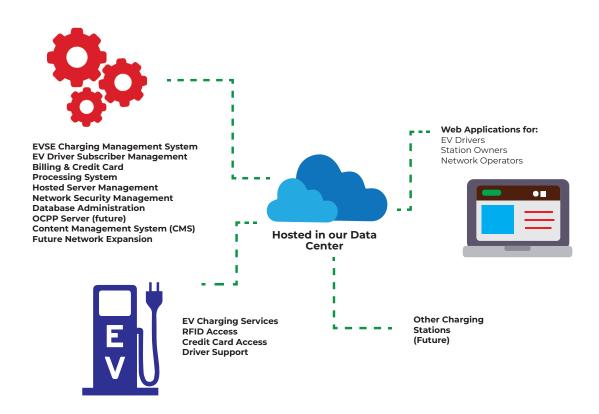
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Get Status 🛛 🗯

- Reset
  - Unlock Connector

# SUPPORT

The Support Center serves as a global support center for charging stations being managed under our Network.





- 24X7X365 "Advanced Services" Technical Support
- Global Support Center
- · Ongoing monitoring of the Electric Vehicle Supply Equipment (EVSE) health and environmental statistics
- Personalized and comprehensive monthly Charging Activity Reports
- · Best practice advice, and guidance from our Technical Expert Team on firmware or Hardware supports
- $\cdot\,$  Capture of Proactive notification of critical EVSE performance.
- Billing and Accounting.

### **HELP DESK SUPPORT PROCESS**

Our support team is constantly working to resolve all the customer issues. When a customer reports an issue, the customer service representative generates a ticket for the issue. The warranty of the item is verified before the support team can proceed to diagnosing. If the warranty is not applicable, the customer will receive a message to replace the item with the new one and the ticket will be closed. But, if the item is in warranty, Return Merchandise Authorization (RMA) is generated and the customer is provided with Level 2 Hardware Support where the item will be diagnosed for issues and attempts will be made to repair. After the part is repaired, it will be reinstalled in the product or if the part is unrepairable, a new part will be installed in the product. After the part is installed, the functionality of the part will be verified again just to be sure. After the issue is successfully fixed, the ticket will be closed by the support team.

### **KEY POINTS**

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### FOR MORE INFORMATION info@evstructure.com

#### www.evstructure.com