

The logo for GadgEon, with 'Gadg' in blue and 'Eon' in orange.

GadgEon

**Engineering
Smartness**

SMART CHARGER GATEWAY

May, 2020
Version 01





Smart-Charger Gateway



Our Client was looking for a Gateway that connects their EV charging units to EV Charge Management platform. The customer was interested to develop a Gateway that not only interfaces with EV charging stations, but also can be securely integrated with a typical Building management solutions that gives them the flexibility to offer additional service offerings to their end customers

Solution Description

- A 'SmartCharger' Gateway has been developed to provide cloud connectivity for OpenEVSE or Z-wave based vehicle charging stations.
- The gateway enabled vehicle charging stations to be controlled and monitored over azure based custom management solution
- The integrated solution allows end customers to start charging sessions on request.
- The Gateway acts as a generic IoT gateway that connect multitude of smart home devices leading to enhanced home automation solution.
- The gateway uses open source technologies like OpenHAB for secure IoT device management.

Outcome and Benefits Delivered

- Enabled the client to connect their EV charging units to the cloud based management application
- The gateway also enabled the client to provide Home automation solutions along with EV charging solution
- End-customers were enabled to initiate charging sessions on their own
- The gateway has an interface for locally initiate charging sessions in case of cloud/internet outage.



The Business Context and Challenges of the Customer

Customer needs a gateway solution to interface EV charging stations to their cloud based charger management platform.

They would also like to extend the gateway to securely integrate with building automation solutions. This will provide them with an option of expanding their service portfolio in future.

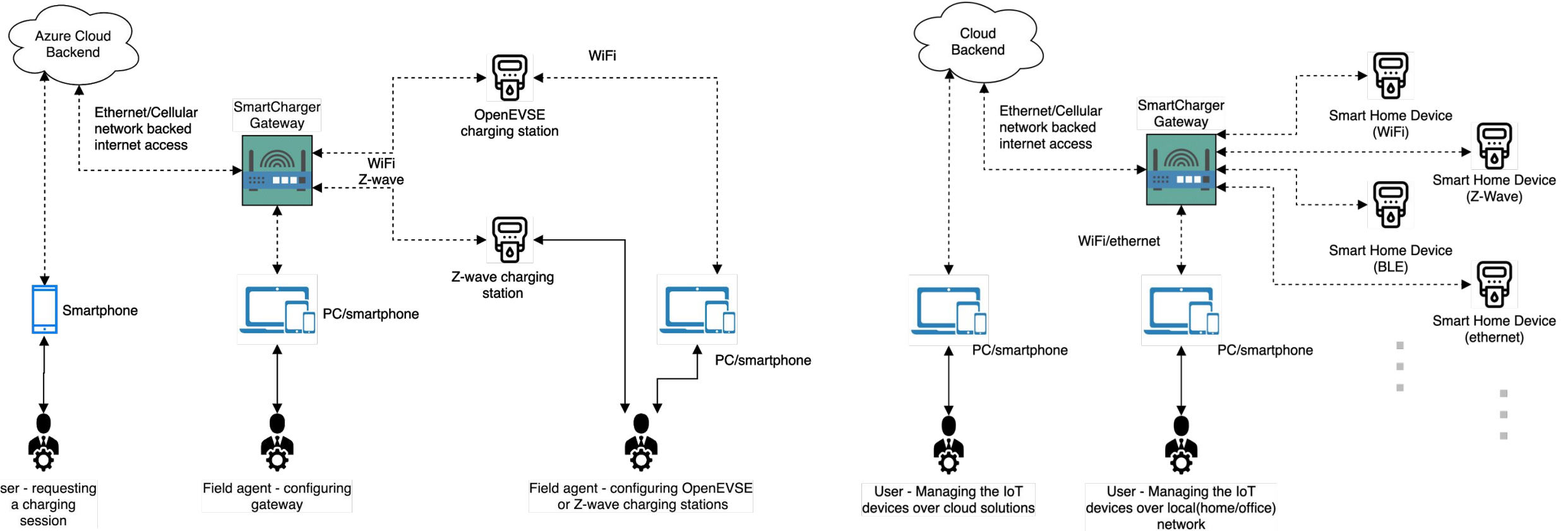


The System Description

- The SmartCharger Gateway is an IOT gateway device, whose primary aim is to bring cloud support for OpenEVSE or Z-wave based vehicle charging stations.
- The cloud solutions provide full control and monitoring of the charging stations.
- It enables a user to start charging sessions on request.
- Apart from the primary function it can act as a generic IoT hub or gateway to connect with multitude of smart home devices and enables easy management of them for hassle-less home automation.
- The gateway uses opensource technologies like OpenHAB for secure IoT device management.

System / Architecture Description

A generic boards like RaspberryPi with custom application to interface with cloud and OpenHAB as a hypervisor to interface with IoT automation devices.



As a EV charging station gateway

As a generic IoT gateway/hub

THANK YOU



For More Details, Let's Connect





Gadgeon Systems Inc.

881 Yosemite Way, Milpitas, CA 95035, USA

CONTACT - USA

Mani Ram - Vice President - Solutions and Technology

 +1-678-900-0874 |  mani.ram@gadgeon.com

Gadgeon Smart Systems Pvt Ltd.

VI 405/E1, Fathima Tower, Maleppally Road, Thrikkakara PO,
Kochi, Kerala, PIN: 682021, India

CONTACT - INDIA

Hari Nair - CEO & Co-Founder

 +91 989-501-5880 |  hari.nair@gadgeon.com

Gadgeon Europe

Antwerpsesteenweg 124/54, 2630

Aartselaar, Belgium

 +32 475 23 39 46 |  europe@gadgeon.com

 sales@gadgeon.com