Schneider Electric

Global Specialist in Energy Management Keeps Electric Vehicles Running With AirVantage Smart Automation

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Based in France, Schneider Electric is a global specialist in energy management withoperations in more than 100 countries. Schneider Electric offers integrated solutionsacross multiple market segments, including leadership positions in energy andinfrastructure, industrial processes, building automation and data centers/networks,as well as a broad presence in residential applications.

Business Challenge

The SAVE (Seine Aval Véhicules Electriques) project is a joint initiative by Renault,Schneider Electric, EDF, the Yvelines General Council, EPAMSA (contractingauthority for Seine Aval) and the Île-de-France region to complete comprehensivetests on electric vehicles and prepare for the introduction of electric vehicles to themass market in France. As part of the project, pilot customers will have access to acharging infrastructure at home and at work, in parking lots and on public highways.

Schneider Electric develops charging terminals for newly built Electric VehicleCharging Stations (EVCS) throughout the test territory. In order to meet the tighttimeline required for the project, as well as include the remote monitoring and controlnecessary to manage charging terminals dispersed through 51 towns and fivecounties, Schneider Electric turned to Sierra Wireless to assist in quick developmentof a service and maintenance connected electric charging terminal.

Sierra Wireless AirVantage ™ Platform solution

Schneider Electric’s electric vehicle charging terminal is a comprehensive hardwareand software solution connected by AirVantage Smart Automation, a machine-tomachine(M2M) Platform as a Service (PaaS) offering that accelerates developmentand significantly reduces costs associated with deploying and operating M2Mindustrial control applications. Smart Automation helps machine OEMs and industrialcontrol systems integrators to quickly connect programmable logic controllers (PLC)and sensors to easily develop M2M applications, enabling OEMs to add servicerevenue to their hardware and enabling Service Providers to augment existingservices with M2M solutions and services.

AirLink Fastrack Xtend

The communication of Schneider Electric’s charging terminal is provided byAirVantage Smart Automation and an AirLink™ Fastrack FXT programmablegateway, offering secure and reliable cellular connectivity. The solution alsoincludes a SIM card and Schneider Electric’s PLC. Using Smart Automation’sremote monitoring and control capabilities, Schneider Electric can manageits dispersed terminals from a central location – troubleshooting problemterminals and maintaining the terminal network without having to sendpersonnel on-site to the EVCS. In addition, Smart Automation providestools for quick application development, such as a consumer smartphoneapplication that would be used to find a nearby EVCS location and book aterminal in advance, allowing electric vehicle drivers to better prepare for thetime required to recharge their vehicles.

Results

Because of the faster time to market, application development tools, remotemanagement and control capabilities and better deployment efficienciesafforded by AirVantage Smart Automation, Schneider Electric will be able tocommit to providing a connected electric vehicle charging terminal to theprogressive SAVE project and gain a leadership position in the fast growinggreen/alternative energy market.

AirVantage Smart Automation benefits Schneider Electric’s chargingterminal by:

- Enabling quick time to market
- Eliminating application development tasks and reducing development efforts
- Providing fast provisioning of the web applications
- Reducing development risk and allowing high scalability
- Enabling remote management and control of dispersed terminals