



CUSTOMER SUCCESS STORY



DRMS-to-MDM Integration
for a Global Infrastructure Company

DRMS-to-MDM Integration

Our client needed a comprehensive Demand Response Management System (DRMS) to provide a unified view of the network in support of their customers, large power utilities. Because the utilities had a range of systems that communicated with a wide variety of Smart Energy Platform vendors, the DRMS needed to incorporate a Service-Oriented Architecture (SOA) to communicate across the disparate vendor systems.

Challenge

The project had business priority to quickly develop, deploy, and integrate with two independent vendors' Meter Data Management (MDM) systems. The project complexity was increased because the selected vendor systems were evolving concurrently at different stages of new feature development. Green Energy Corp was selected to build an adapter solution because of our seasoned team of engineers and experience with a variety of MDM systems, ZigBee and SOA architectures.

Task

Develop a Scalable Multi-Vendor Adapter to One Vendor's MDM System

- Architect an adapter that allows DRMS to communicate to multiple MDM systems via a single, abstract interface.
- Route the communication to the desired MDM.
- Compensate for a lack of open standard API to the MDMs by accommodating system differences through a web services capabilities and message flow architecture.
- Provide ability to support multiple versions of a vendor's web services.
- Deliver on time to meet customer trial date.
- Overcome market factors that complicated acquisition of system documentation, hardware, etc.

Delivered

A DRMS-to-MDM Adapter for Two Different Vendor MDMs

- Designed a dual-layer architecture with a top layer providing a single interface to the DRMS while the lower layer abstracted the vendor-specific differences to MDM systems
- Designed the adapter layer to be stateless to enable scalability and increase reliability

Delivered (continued)

- Built the adapter layer to work with two leading MDM systems instead of one within the target timeframe
- Developed an automated testing harness using soap UI to test the adapter without the need for the underlying MDM or emulator to be present

Results

With our experience and flexibility, the client gained the timely delivery of two software adapters instead of just one. Our participation in the project placed no additional load on the client's technical leads and project management team. The client was able to focus their engineering team on their DRMS and other critical features for their product. The regular project communication and demonstration of the evolving adapter gave the client confidence the deadline would be met and the opportunity to efficiently provide feedback.

As market drivers changed during the project window, we were able to dynamically alter deliverables as the client desired and deliver the system on time within the aggressive schedule — all while staying under budget.

About Green Energy Corp

Green Energy Corporation is a technology company that provides software engineering services to communications, utilities and energy companies and delivers software products to enable the Smart Grid of the future.

Our offerings include the GreenBus™ open source platform that enables utilities to move from legacy operations systems to the smart grid, and software engineering services for communications and utility companies.

The GreenBus forms the foundation for TotalGrid.org — a Green Energy Corp sponsored open source community dedicated to modernizing national power systems and microgrids while driving the development of the Smart Grid. Visit TotalGrid.org for more information.

Contact Us

For more information about our software engineering solutions, please visit **greenenergycorp.com** or call 303-453-8338 to speak to a Green Energy Corp representative.

If you are interested in developing applications for the GreenBus, or for more info on the **GreenBus Alliance Program**, contact us at 303-453-8380

Headquarters

**12050 North Pecos Street
Suite 210
Denver, Colorado 80234
303.453.8300**

Centennial Campus

**North Carolina State Offices
Venture IV Building
1730 Varsity Drive
Suite 500
Raleigh, North Carolina 27606
919.836.9916**

Durango, Colorado Offices

**1150 Main Avenue
Unit C
Durango, Colorado 81301
303.453.8361**

info@greenenergycorp.com

Total Grid Management
and GreenBus are trademarks
of Green Energy Corp.
All rights reserved ©2010

Rev 02/2011

