

Smart Metering Management Platform

Winner of 2011 Smart Grid Excellence Award



Smart Metering – It has arrived

Deployment of smart meters and smart devices is gathering momentum all over the world. Around 60 million smart meters have already been installed in the last ten years and several large scale deployments by utilities have either already started or are in the advanced planning stages. While concerns on costs, privacy, safety and security continue to surface, utilities have conclusively moved from ‘why smart meters’ debate to ‘when smart meters’ planning. Active support from policy makers and regulators, and harmonization of standards are expected to accelerate the proliferation of smart meters in the current decade and beyond. However, deployment of smart meters constitutes only the first lap in a long and complex journey towards realization of “Smart Grid” - a system that ensures quality, reliability and security of power while empowering consumers and utilities to make informed and dynamic decisions.

At a micro level, smart meters can be considered as distributed sources that produce data, analogous to the distributed generation sources that produce electricity. This humongous amount of data, generated at rapid frequency, needs to be acquired, stored, processed, analyzed and used in near real time to achieve major Smart Grid objectives. At the same time, smart meters can be dynamically configured to respond to consumer choices and prevailing supply conditions. Availability of this data and configurability options, by themselves, provide opportunities for utilities to IT-enable and reengineer business processes like never before.

The Smart Grid Roadmap

While smart meters are garnering all the attention at present due to sheer numbers and enormity of the installation process, acquisition and deployment of robust ICT systems will be crucial for utilities to deliver the envisaged benefits from smart metering and ensure sustained value creation from smart grids. At Cognizant, we believe it is right time for utilities to create and follow a comprehensive roadmap to achieve smart grids including and looking beyond smart meters. This roadmap should detail out the prioritization, deployment and integration path of IT-enabled utility applications that will enable the functional smart grids of the future. With smart meters already in the field, any further delay will only add to the deferment of benefits and may result into the weakening of the business case. We believe that the failure to weave integration requirements into the roadmap from the beginning can prove to be a difficult, costly and progress-inhibiting issue to address later.

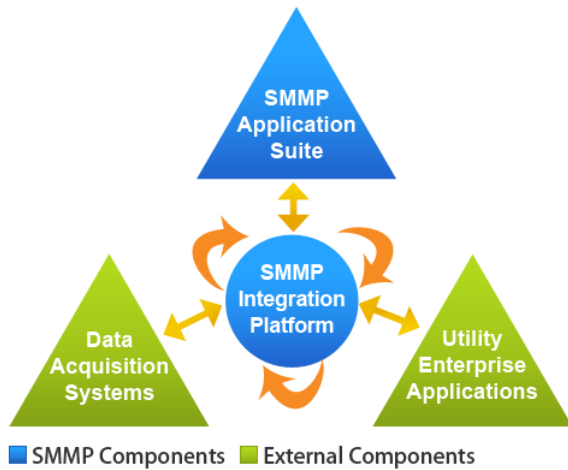
The Smart Solution

As part of our commitment to utility companies and broader smart grid community, Cognizant has developed a unique solution called Smart Metering Management Platform (SMMP) which enables utilities to leverage enhanced value from smart metering investments in the short run while preparing for smart grids. The solution is designed in such a way that it can be deployed immediately to integrate existing IT package applications and systems with smart meters while being future-ready to deliver advanced smart grid features



as they become available. By allowing consumers, utilities and other stakeholders to have a common and real-time vision of the electricity delivery system, SMMP paves the way for delivery of services geared towards realization of smart grids in a consistent and cost-effective manner.

The following figure depicts how major components of SMMP solution fit into the utility IT ecosystem.



SMMP Integration Platform

The integration platform forms the core of the SMMP solution. It provides ready-built interfaces to integrate most prevalent utility IT package applications and systems that serve key business process areas ranging from asset management to outage management at the enterprise level. Service Oriented Architecture (SOA) and compliance with major industry-recognized standards facilitate integration with widest variety of systems making SMMP vendor-agnostic. All the applications in the SMMP application suite also work seamlessly with the integration platform. In this way, SMMP solution addresses one of the most pressing issues facing utilities today and enables them to start on the smart grid journey immediately.

SMMP Application Suite

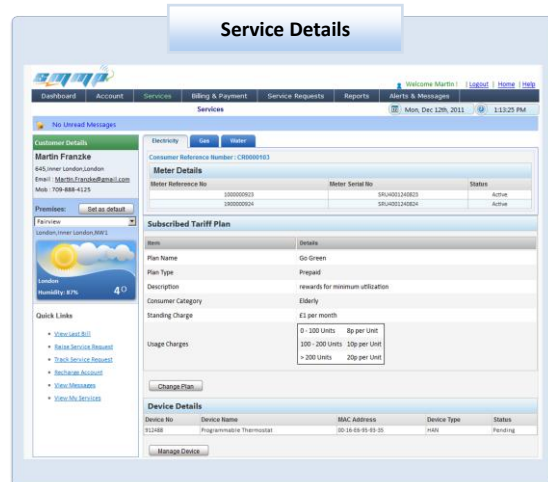
The application suite offers an ever-evolving set of applications catering to advanced Smart Grid functionalities. Built in a modular fashion, these applications work in plug-and-play mode and offer unparalleled flexibility and configurability to the utility companies. These applications also serve to extend the functionalities of package applications by providing advanced analytics and web-access capabilities.

Application Description and Snapshots

smartCSS

It is one-stop-shop for consumers to do almost everything related to energy consumption and transaction with the utility such as view and analyze consumption, avail and modify services, view and pay bills etc. Attractive, intuitive and easy-to-use web portal and mobile application allow consumer to stay in control of consumption and expenditure anytime and anywhere.

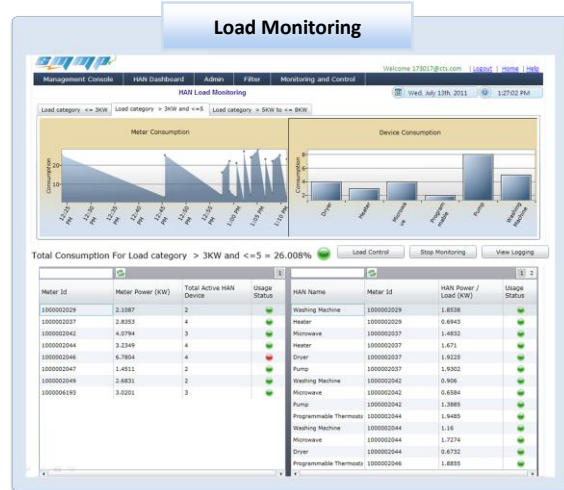
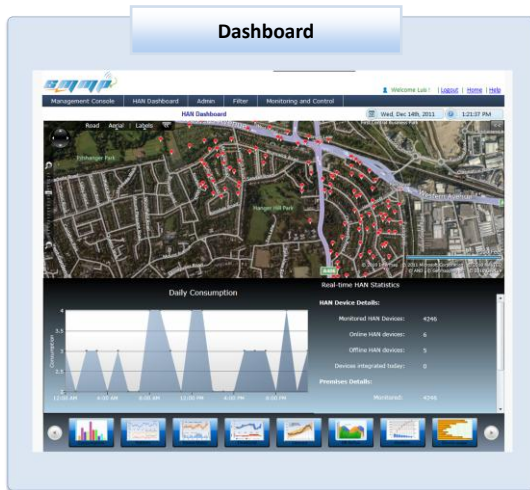
Solution Snapshots



smartHAN

This application allows utility to monitor and control registered HAN devices in real time against defined schedules and DR programs. Map-based visualization feature draws attention to any threshold violation while analytical engine triggers control actions as per the pre-set user preferences and supply conditions.

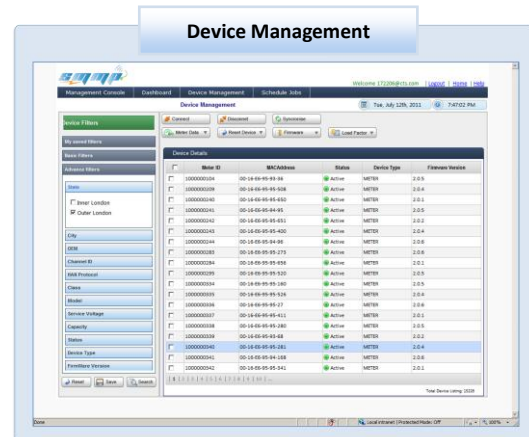
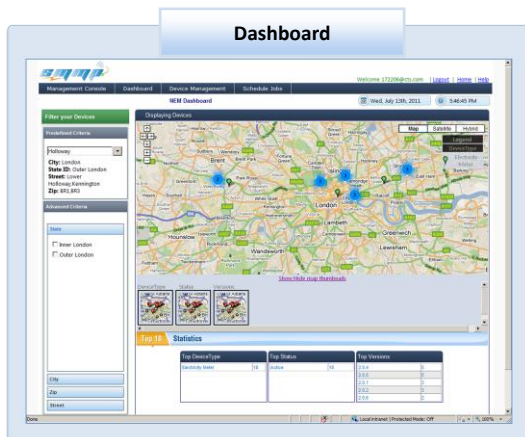
Solution Snapshots



smartNEM

This package equips utility with the capability to monitor, control and configure smart meters and communication devices in the smart metering ecosystem. A complete range of activities including remote connect-disconnect, clock synchronization, software download etc. can either be scheduled or executed on as-needed basis to keep the system running round the clock.

Solution Snapshots



smartMobility

This pack of hybrid mobile apps provides another channel for accessing major applications while also providing dedicated mobile-based applications. FaultScout, an in-field fault monitoring and tracking application, provides location based services, in-field ticket management and comprehensive what-if analysis for efficient fault management operations.

Solution Snapshots - FaultScout Solution



The Cognizant Difference

Cognizant's combination of consulting expertise, rich domain experience and innovative use of open, standards-based technology helps us guide the world's leading utilities companies on their Smart Metering journeys. Our solutions provide the flexibility and scalability to adapt to evolving business needs, seamless integration with other enterprise systems, reliability, security and data integrity for total peace of mind.

About Cognizant

Cognizant (NASDAQ: CTSH) is a leading provider of information technology, consulting, and business process outsourcing services, dedicated to helping the world's leading companies build stronger businesses. Headquartered in Teaneck, New Jersey (U.S.), Cognizant combines a passion for client satisfaction, technology innovation, deep industry and business process expertise, and a global, collaborative workforce that embodies the future of work. With over 50 delivery centers worldwide and 130,000 employees as of September 30, 2011, Cognizant is a member of the NASDAQ-100, the S&P 500, the Forbes Global 2000, and the Fortune 500 and is ranked among the top performing and fastest growing companies in the world. Visit us online at www.cognizant.com or follow us on Twitter: Cognizant.



World Headquarters

500 Frank W. Burr Blvd.
Teaneck, NJ 07666 USA
Phone: +1 201 801 0233
Fax: +1 201 801 0243
Toll free: +1 888 037 3277
Email: inquiry@cognizant.com

European Headquarters

Haymarket House
28-29 Haymarket
London SW1Y 4SP UK
Phone: +44 (0) 20 7321 4888
Fax: +44 (0) 20 7321 4890
Email: infouk@cognizant.com

India Operations Headquarters

#5/535, Old Mahabalipuram Road
Okkiyam Pettai, Thoraipakkam
Chennai, 600 096 India
Phone: +91 (0) 44 4209 6000
Fax: +91 (0) 44 4209 6060
Email: inquiryindia@cognizant.com

© Copyright 2011, Cognizant. All rights reserved. No part of this document may be reproduced, stored in a retrieval system, transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the express written permission from Cognizant. The information contained herein is subject to change without notice. All other trademarks mentioned herein are the property of their respective owners.

