Experience

Siemens EnergyIP provides essential software that enables electric, gas, and water utilities to realize the full benefits of the smart grid with the lowest cost of ownership. Leading utilities worldwide depend on Siemens Smart Grid Management Software to reduce operational costs, improve customer service, and drive energy efficiency. With the most large-scale deployments in the industry, and strategic partnerships with SAP, Accenture, HCL, IBM, Sparta, CSC, Logica, and Verizon, Siemens has built a reputation for unparalleled expertise that ensures customer success.

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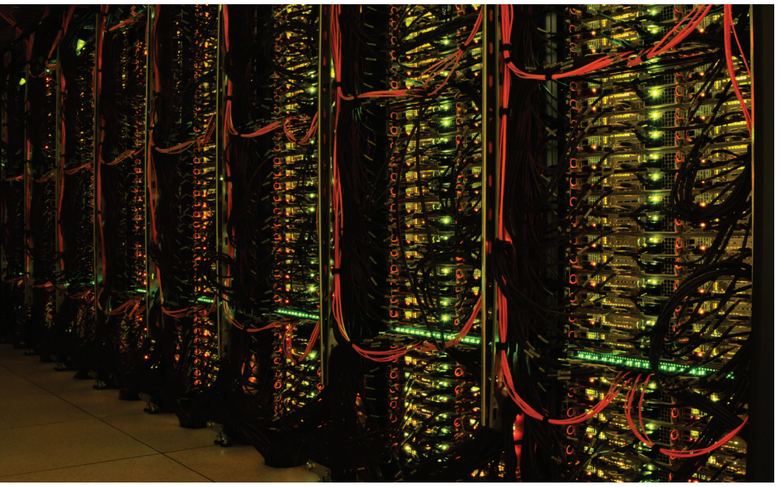
SIEMENS

EnergyIP SAP Adapter

Standardized integration between EnergyIP and SAP for better smart grid functionality

www.siemens.com/emeter



Ensure seamless integration with Siemens EnergyIP's standard interfaces between your SAP and AMI systems.

"At CPS we have a history of embracing technological innovation to improve services for our customers. Siemens SAP MDUS solution allowed us to integrate Siemens EnergyIP with SAP with virtually no additional customization, dramatically reducing our AMI integration costs. We are now well-poised to give our customers the information they need to manage their energy usage."

Lawanda Parnell
Sr. Director of Enterprise Application Delivery
CPS Energy

In today's dynamic technical and regulatory environment, utilities need to become more agile across their enterprise. The Siemens EnergyIP platform enables seamless integration with advanced metering infrastructure (AMI) and associated enterprise systems, providing utilities with unmatched flexibility and improved functionality.

In 2007, SAP, a leader in delivering mission-critical enterprise software ranging from customer relationship management (CRM) to enterprise resource planning (ERP) systems, invited Siemens (then eMeter) to become a strategic vendor for their Smart Grid Management Solutions and take a seat as a founding member of their Lighthouse Council, a group tasked with shaping SAP's utility solution. Helping utilities overcome the challenges that come with integrating SAP for Utilities with an AMI infrastructure and meter data management (MDM) system as they deploy smart grid technology was a key element of that task.

Siemens and SAP are committed to making a difference for our shared customers. To that end, the Siemens EnergyIP Meter Data, Unification, and Synchronization (MDUS) Bundle has been certified as an SAP Qualified Business Solution (QBS), and continues to actively participate in the successor to the Lighthouse Council, the Smart Grid Co-Innovation Council.

Proven, certified for critical applications

The Siemens EnergyIP MDUS Bundle is a proven, certified version of EnergyIP designed for SAP customers using critical Siemens applications, providing seamless integration by using standard interfaces between your SAP and AMI systems.

SAP adapter is the integration package that implements the standardized interfaces between EnergyIP and SAP ISU. Supported by both Siemens and SAP, SAP adapter productizes the most commonly used web services and integration interfaces to dramatically reduce complexity and cost of the integration project between these two highly advanced platforms, minimizing cost of ownership and expediting time to market.

SAP adapter receives requests from SAP and routes them to the appropriate EnergyIP services for processing. It also forwards processed meter reads and events from AMI systems to SAP.

Core EnergyIP Functionality

Data Collection and Processing
- AMI Data Store
- Meter Usage Data Repository
- Data Collection Operations
- Real-Time Data Processing
- Data Synchronization Engine
- Real-Time VEE

Admin and Reporting
- System Administration Console
- Reporting Framework
- Data Collection Performance Reports

AMI Device Management
- Automated Meter Provisioning
- AMI Systems Monitoring
- AMI Exception Handling

Business Process Automation
- Event Notification Services
- Event Analyzer and Publisher
- Workflow Engine
- Activity Gateway

Reports
- AMR Installation Status Report
- Billing Data Change Report
- Discovered Not Provisioned Report
- Estimation Detail Failure Report
- Excessive Missing Reads Report
- Missing Interval Aging Report
- Missing Reads Report
- Missing Reads Summary Report
- Validation Failure Detail Report
- VEE Summary Report

Advanced Applications
- Interval Billing
- Register Billing
- Remote Connect/Disconnect

SAP Adapter Key Features:

Quickly turn data into actions
Leverage actionable information across your utility with Siemens EnergyIP SAP Adapter. With support for SAP IS-U Enhancement Packs 4, 5, 6 and 7, the Siemens MDUS integration pack lets you execute end-to-end processes and enable data flow between systems, connecting the Siemens EnergyIP platform and applications with SAP's AMI features.

Automates master data synchronization
Adding new meters to the system or modifying existing meters causes the SAP system to trigger a web service call to EnergyIP, which then synchronizes the data.

Simplifies device installation and provisioning
Once a meter is installed, SAP sends EnergyIP detailed installation information. EnergyIP creates related records that tie the meter to a specific service point and location. Once EnergyIP completes the provisioning process, a notification is sent back to SAP confirming that provisioning is complete. SAP also notifies EnergyIP if a meter is removed, so the related record can be removed.

Automates meter read data delivery
SAP will trigger a meter read request from EnergyIP for a variety of transactions including move-in/move-out, cycle billing, off-cycle reads and control reads. EnergyIP then creates a request within the billing services application. Once that request is fulfilled, the adapter sends the appropriate value back to SAP to complete the process. Requests can also be cancelled, should a read no longer be required.

Enables on-demand meter reads
When SAP triggers a request for an on-demand read, EnergyIP sends a message to the meter via the Activity Gateway for a meter read. Once complete, confirmation is sent to SAP.

Simplifies interval data delivery
Interval data can be pushed to the SAP system on a scheduled basis. The interval data goes through the validation, estimation and editing (VEE) process in EnergyIP, with validated or estimated values sent to SAP on a regular schedule—daily or hourly, for example—or based on customizable business rules. SAP stores the values in the Energy Data Management solution, where it is available for further processing.

Adds new object and relationship capabilities
New services have been added to support synchronization of new objects, including support for sending premise and device location data, and the ability to link devices or Current Transformers and Potential Transformers (CTPT) to a communication module.

Enhances meter data consumption capabilities
Framed usage data can be requested based on time-of-use (TOU) bins or critical peak times. Agents can view interval data from the MDUS when required to analyze a rate or view the details behind a TOU bin. Interval data can also continue to be replicated in SAP, if desired.

Leverages meter commands
For meters with remote capabilities, EnergyIP offers web services that support connection status changes and operational state checks. When a status change request or operational state check is initiated in SAP, it is sent to the MDUS. EnergyIP then routes the request to the appropriate head-end. When the request has been executed EnergyIP sends the information back to SAP, completing the process.