Intelligent Bidirectional OMS Integration

With LiveData Utilities RTI OMS™, Outage Management Systems (OMS) reach their full potential to automate and optimize management of the smart grid, achieving customer service goals of more timely responses, increased reliability, and improved service quality.

Enhance situational awareness and reduce control room operator errors with a single GUI for control, alarms, and OMS functions:

- Improve restoration time with continuous, immediate, and structured visibility across the grid
- Reduce outage restoration time by enabling OMS to automate control of grid devices, systems, and networks with bidirectional communications through SCADA and EMS systems
- Increase operational efficiency by facilitating secure OMS-driven fault isolation and restoration
- Streamline deployment with industry-standard protocols
- Reduce cost of maintenance by coordinating network modeling with custom batch configuration
- Support accurate reliability reporting by providing OMS with precise timing for momentary and sustained outages

RTI OMS bidirectionally captures, transforms, and delivers data from the power grid to outage management systems (OMS) to efficiently detect, report, and resolve outage incidents. In turn, operational instructions from the OMS are transformed by RTI OMS into formats and commands securely delivered to SCADA and EMS systems to drive devices, networks, and systems.

Deliver Reliable Integration

RTI OMS provides integration functions that enable data from grid devices to be translated into industry-standard protocols and application-specific formats for immediate use by OMS systems to model and visualize the state of the grid. It automatically analyzes and reports outages that result from SCADA device lockouts, and provides the OMS with indicators of momentary operations, allowing the OMS to calculate accurate momentary outage statistics.

Improve Restoration Time

RTI OMS delivers real-time distribution network status information to the OMS to support OMS-based switch management. Real-time fault indicators and fault magnitudes allow the OMS to predict the most likely location of faults. Current, voltage, and other analog telemetry enables OMS base load and power flow analysis features, including switch management, feeder load management, and auto restoration calculations.

Enable Automated Restoration

RTI OMS carries communications from OMS securely back to SCADA to control grid devices. For example, remote control requests can flow from OMS through RTI OMS into SCADA for automated control of devices and switch management. Fault Line Analysis (FLA) with Hot Line Tag or telemetry point information can be transformed through RTI OMS to securely communicate remote control requests between OMS and SCADA.

Proven Scalability

LiveData Utilities™ customers have been extending and evolving their grid networks with LiveData technology for over 20 years.

RTI OMS is configurable and supports multiple industry-standard utility protocols, such as ICCP, DNP, and Modbus. It is designed to be flexible and extensible, supporting easy addition of data transformations and configurable application logic to process data for use by additional operational and business systems. Single-server applications can be scaled to tens of thousands of data points.

Simplify Maintenance

LiveData Utilities Configuration Manager allows you to easily and rapidly reconfigure data flows to extend access to, and delivery of, real-time data across your networks. It is vendor-neutral, enabling integration across diverse vendor systems and applications using a single platform to span and unify inputs across today's existing operations applications, as well as new and planned traditional and smart grid deployments. Intelligent configurations can be developed once and applied network-wide as a batch, reducing the amount of time needed to deploy to the extended network.

Secure Communications - Bridging the CIP Boundary

RTI OMS, in conjunction with LiveData Utilities RTI Security™, safely bridges the CIP boundary, segmenting the network and performing protocol-aware (ICCP, DNP3, and others) validation. We do not simply assume that any traffic coming through a secure port is safe; we validate at the protocol level every single byte passing through the LiveData Utilities RTI Platform™. LiveData RTI permits networks to be segmented into virtual control centers to support securing and protecting operational systems from cyber threats. Configurable, intelligent logic enables the network to be managed and quickly reconfigured to thwart current and future security threats and to meet regulatory mandates.

High Availability

LiveData RTI High-Availability™ (LD/HA) solutions can be added to installations to ensure customer uptime and ease ongoing system management. LD/HA supports three deployment modes: Native, Load Balancer, and Windows Server Failover Clustering.

About LiveData Utilities

LiveData Utilities is the trusted source for operations technology data integration and visualization. Our smart grid solutions deliver operational intelligence to enable confident real-time management of power grid assets for critical infrastructure network segmentation and protection; ISO connectivity; SCADA, OMS, and DMS real-time state monitoring, control, and communication; demand response aggregation; visualization; and data analytics. Founded in 1991, LiveData is headquartered in Cambridge, MA. For more information, visit livedatautilities.com.

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