

UtilityIQ[®] Network Element Manager

A network management platform created specifically for smart grid network management

- » Supports large deployments with a scalable architecture
- » Integrates easily with “manager of managers” via standards-based event-forwarding architecture
- » Provides centralized network performance and capacity metrics
- » Supports on-demand queries for multiple devices simultaneously
- » Enables utility staff to evaluate and present data with detailed reports and graphs
- » Supports troubleshooting of any device on demand

Secure utility network management

The Silver Spring Smart Energy Platform combines network infrastructure, software, and professional services to enable a range of smart grid applications.

Part of the UtilityIQ application suite, UtilityIQ[®] Network Element Manager (NEM) combines network management best practices and visual intelligence to ensure a streamlined infrastructure for your smart grid. This highly configurable application supports advanced network management capabilities while interoperating with existing back-office systems and storage. UtilityIQ NEM collects network data using industry-standard protocols and enables configurable event policies for efficient handling of important network events, creating a foundation for secure utility network management now and in the future.

Wide open possibilities

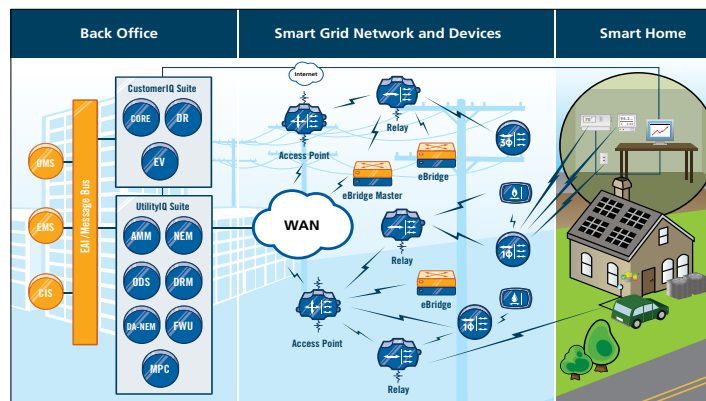
UtilityIQ Network Element Manager is a network element management system for smart grid technology and may be integrated with existing applications, increasing flexibility. Designed to

improve smart grid communications regardless of your application, UtilityIQ NEM ensures delivery and reliability of operational meter data, price signaling, remote connect/disconnect, load control and distribution automation.

The high-performance data collection and processing delivered by UtilityIQ NEM scales up to even the largest deployments, offering at-a-glance mesh network topology status, summary statistics, indicators by service and device type, and active events by severity and type.



UtilityIQ NEM Dashboard Simplicity

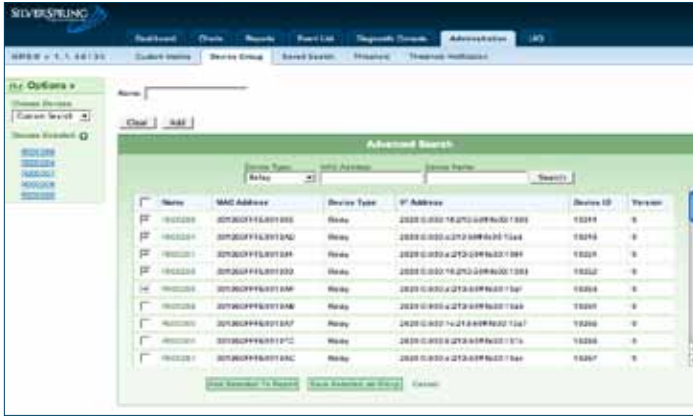


An advanced, IP-based network enables the smart grid—from the data center to the customer premise.

About Silver Spring Networks

Silver Spring Networks is a leading Smart Grid solution provider that enables utilities to achieve operational efficiencies, reduce carbon emissions and empower their consumers with new ways to monitor and manage their energy consumption. Silver Spring provides the hardware, software and services that allow utilities to deploy and run multiple advanced solutions, including Smart Metering, Demand Response, Distribution Automation and Distributed Generation, over a single, unified network. The Silver Spring Smart Energy Platform is based on open, Internet Protocol (IP) standards, allowing continuous, two-way communication between the utility and devices on the grid. Silver Spring has numerous deployments with leading utilities in the US and abroad, including Florida Power & Light, Pacific Gas & Electric, Pepco Holdings, Inc., Jemena Electricity Networks Limited and United Energy Distribution, among others. For additional information, please visit www.silverspringnetworks.com.

UtilityIQ® Network Element Manager



UtilityIQ NEM Data Management

Flexible, powerful, and open, UtilityIQ Network Element Manager provides visibility to the state of the network. UtilityIQ NEM effectively manages smart grid applications such as UtilityIQ Advanced Metering Manager while including key attributes to meet the specific needs of electricity, gas, and water service distribution.

UtilityIQ NEM is rich with features for proactive network monitoring. UtilityIQ NEM supports device management, network health monitoring, version control, remote firmware upgrades, and capacity planning and management. Most importantly, it ensures that business-critical services such as demand response, dynamic pricing, billing and collections, and automated outage/restoration management applications get the data they need when they need it.

Simplicity and visibility

Installation, configuration, provisioning, management, monitoring, and diagnostic functions are built in. The application uses simple dashboards to display network status by service, device type, capacity, and routing efficiency.

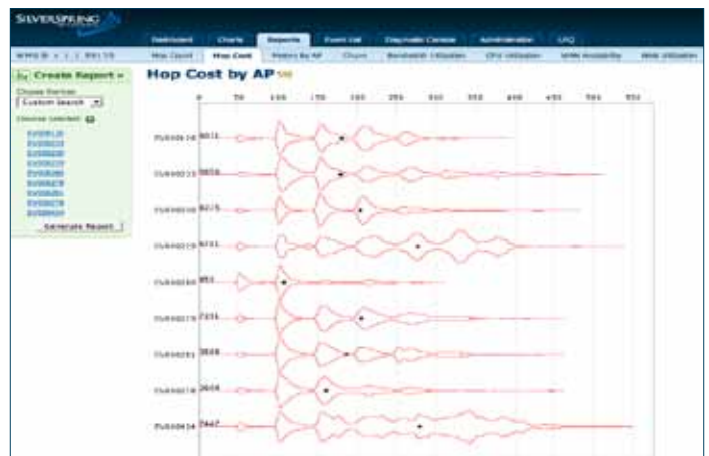
On-demand reports help operators visually pinpoint network stability, capacity, performance, and availability metrics for quick action. Flexible alert configuration policies reveal important network events driven by both static and dynamic thresholds. The system displays metrics of several devices with easy-to-interpret visualization, allowing performance issues to be judged strictly by metrics or by relative inconsistency across devices.

Persistent, reliable network monitoring

All events and statistics persist in the UtilityIQ Network Element Manager database for easy access, with the flexibility to sort output by any column and export it to standard comma-separated values format. Operators can create reports on the mesh hop-count distribution to monitor routing efficiency and generate 24-hour event summaries by event type or bandwidth utilization. Other easily accessed visualizations include:

- » Bandwidth utilization
- » WAN availability, including packet loss, round-trip time and access point churn reports
- » Meter counts by access point
- » Spark Lines for at-a-glance comparisons of metrics across multiple devices
- » Line charts for plot time-series metrics by device or by statistic
- » Bar graphs for a single metric or stacked to represent multiple metrics for one or more devices

UtilityIQ Network Element Manager easily integrates with most network management systems through its event-forwarding system. Events can be forwarded via hierarchical forwarding functions, and alert policies can be defined via flexible threshold configurations. Operators can filter and sort events by type, device, severity, time, or virtually any other metric. Utility staff can also associate events with trouble tickets, assign status codes, and set estimated time to repair.



UtilityIQ NEM Data Collection