



Voltage Visualization

Landis+Gyr
manage energy better

Effectively Identify Distribution Circuit Voltage Anomalies and Analyze Grid Voltage Performance

Overview

Landis+Gyr's Advanced Grid Analytics Voltage Visualization Module allows utilities to maximize the benefits of their AMI investments and implement more cost effective Volt/ VAR management and conservation voltage reduction (CVR) programs. The application imports data from GIS or MultiSpeak® compliant distribution connectivity models and meter voltage data from AMI or MDMS applications. The solution also provides detailed system-wide voltage profiles.

Utility system planners and distribution engineers can leverage the visualization tools and interactive drill-down capabilities within the application to quickly and effectively assess voltage profiles along a feeder and identify voltage conditions outside of target ranges.

The application enables utilities to proactively correct anomalies, avoid power quality issues, minimize customer complaints and reduce truck rolls by providing more accurate guidance to the crew.

The browser-based, dynamic user interface offers geospatial visualization of full distribution connectivity model and grid assets by utilizing Google Maps™ mapping service. The database and analytical capabilities allow interactive, color-coded, geographic display of all individual system components. The fully interactive drill-down functionality provides detailed data retrieval and display for individual substations, feeders, distribution transformers and meters.

The overview of historical and near-real time voltage analysis includes:

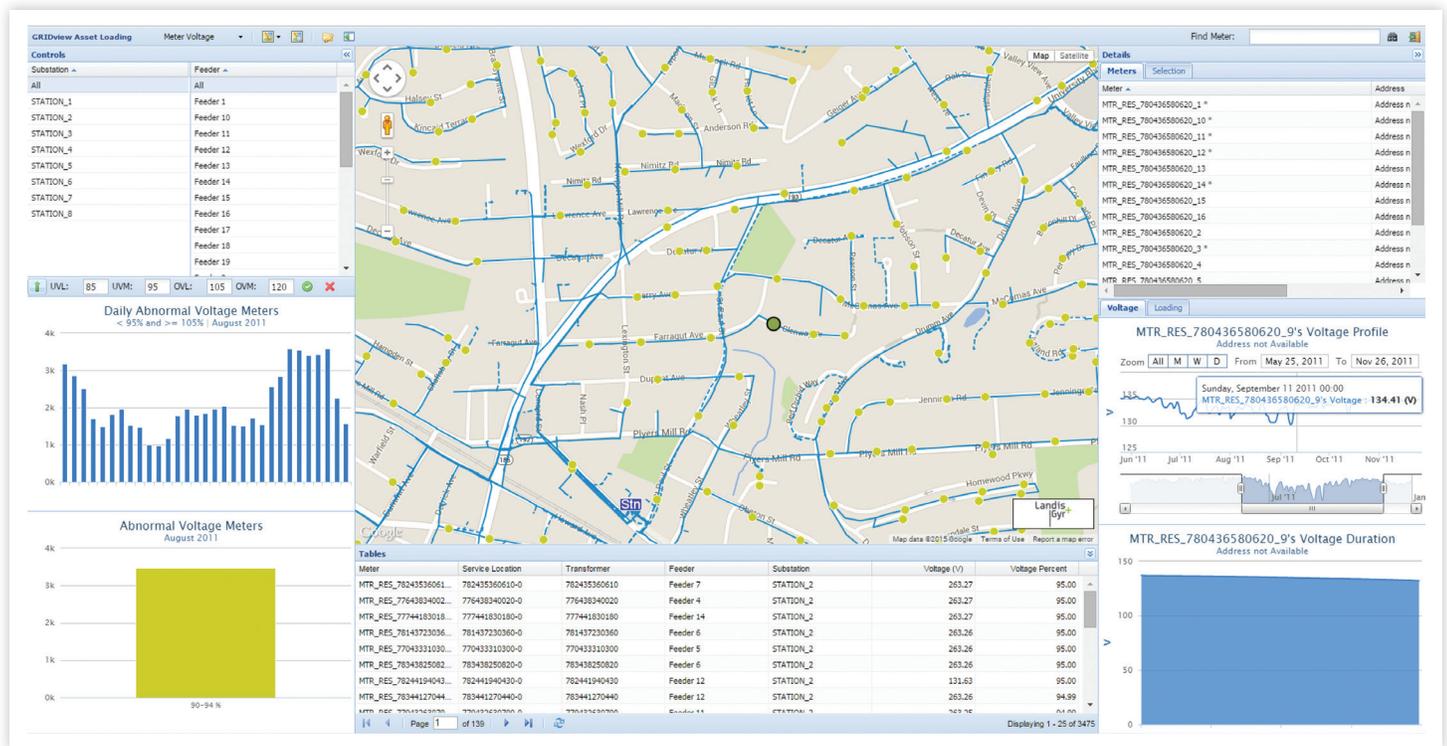
- Voltage violations above and below regulatory limits using both measured and calculated voltage values
- Summaries of transformer and meter voltage levels
- Individual meter voltage profile
- Individual meter voltage duration profile

FEATURES & BENEFITS:

Why Landis+Gyr makes a difference.

- Display historical and near-real time circuit voltage profiles
- View reports through Google Maps integration
- Address circuit voltage performance issues
- Prioritize locations for CVR and Volt/VAR optimization
- Identify over and under voltage
- Bring in system updates automatically from utility GIS or MultiSpeak® compliant system

Advanced Grid Analytics: Voltage Visualization



Sample Screenshot: Voltage Visualization Application – meter voltage profile

Platform

The grid analytics solution consists of a powerful enterprise platform and modular, web-based, user friendly modules. The platform enables utilities to leverage data integration, visualization and advanced algorithms for multiple analyses and benefits. Given the modular nature of the applications, as needs change or grow, the same platform and data can be utilized, leveraging economies of scale and eliminating data silos and the need to manage multiple vendor systems.

People

Landis+Gyr's professional services team offers a unique combination of power system engineers, subject matter

experts, software and technology architects and integration specialists. By leveraging Landis+Gyr's proven and best in class implementation methodology and standard-based adapters, utilities can start realizing benefits quickly.

Pathway

Landis+Gyr provides various deployment options that are cost-effective, robust, scalable and meet service levels now and in the future. The solution can either be deployed at the utility's data-center or hosted at Landis+Gyr's cloud-based, secure and SSAE-16 compliant Network Operations Center.

Specifications

Supported Operating Systems	Windows or Linux
Recommended Memory	32GB RAM
Required Third Party Licensing	Google Maps API Corporate License and Optional Mongo DB Enterprise License
Interface Standards Supported	CIM, MultiSpeak, DNP3/ICCP, GIS Shape files and other file based formats
Pre-built Adapters	Landis+Gyr Command Center, USC and MDMS; CYME, ESRI GIS
Data Types Required	AMI voltage profile, KW intervals (15, 30 or 60 minutes), connectivity model