The 21st Century distribution utility needs more and more real-time data to manage its network. At the same time, there is continuing pressure on both operating and capital expenditure, making it a frequent requirement to continue to run with legacy SCADA infrastructure.

The answer is GE Energy’s PowerOnFusion SCADA.

Benefits
- Supports multiple protocols
- Flexible architecture
- Supports distribution automation
- Reduces SAIFI/SAIDI
- Helps meet regulatory pressures

Features
Flexible Architecture
PowerOnFusion Front End Processors (FEPs) can be deployed anywhere in the utility, to suit the current and future communications infrastructure. FEPs are standard PCs, meaning low initial and on-going costs and can be arranged as dual-redundant pairs.

The SCADA data retrieved via the FEPs is stored in a single, multi-redundant, PowerOnFusion RT Real Time Database. All events are made visible to all users, subject to their assigned territories and privileges.

Multiple Protocol FEPs
Each FEP can support one or all of the available protocols, making it easier, and cheaper, to either continue to support or transition away from a legacy SCADA system over a managed timescale.

Additional Protocols can be ‘hot-loaded’ to avoid FEP down times.

Supported Protocols
The range of supported protocols is ever increasing and includes support for multiple industry standard, proprietary and legacy communication protocols.

Fully embedded in PowerOnFusion DMS
A single user interface to all network events is achieved via the PowerOnFusion Network Management System (NMS).

The product is seamlessly integrated with the PowerOnFusion Outage Management System (OMS) resulting in an automatic correlation of trouble calls and network events.

Alarm Presentation
All SCADA events can be presented in the PowerOnFusion DMS, including a multidimensional filtering of current and historical alarms with full support for timetagged alarms/events.

Variable Alarm Limits
Alarm Limits can be defined as seasonal (spring, fall, summer, winter), temporary (for use during abnormal weather conditions) and can also be configured as a complex function based on multiple SCADA analogues.

PowerOnFusion SCADA supports three, four and five analog states, for example, Hi-Hi, Hi, Normal, Lo and Lo-Lo, together with hysteresis.
Distribution Automation

Sequence switching can be used to provide an enterprise wide automation at the lowest incremental cost with the highest operational flexibility. User or event-triggered, with scriptable user intervention—The trigger event can be a complex calculated function.

Sequence Switching is being deployed at PowerOnFusion customer sites to great advantage with considerable SAIFI/SAIDI improvements earning significant regulatory rewards.

Simple Volt/VAr control can already be affected, with a more complex Volt/VAr control to be a future implementation making use of PowerOnFusion Network Analysis.

PowerOnFusion Load Shed and Restoration

A feature of the group telecontrol functionality, allows the operations within the plans to be associated with MW load.

This provides the functionality required to support linear, circular and rotational Load Shedding and Restoration schemes.

Trending

Display trend graphs of historical and current measurements in real-time. Full optional support for OSIsoft PI Data Historian.

Group Telecontrols and Telecontrol Plans

Telecontrol plans can be prepared to handle key scenarios by the management of a set of related telecontrollable items. The plans can be activated on request through a single command being instructed. Examples of the application of these include group voltage reduce/restore, group control of auto-reclose schemes during adverse weather.

To learn more about the PowerOnFusion product range and what it can do for your organization, call the GE Energy office in your region:

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www.gepower.com/prod_serv/subst_ntwk.htm

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