ASE 61850 Suite
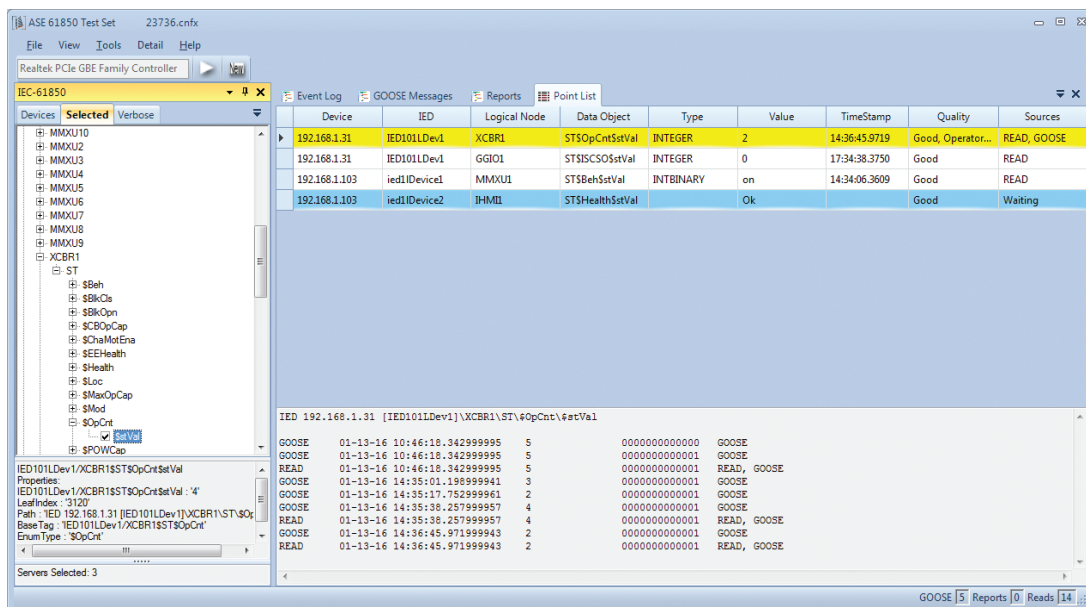
Applied Systems Engineering, Inc. now offers the ASE 61850 Suite to meet all your IEC 61850 compliance and management needs. The ASE 61850 Suite is powered by the ASE 61850 Communications TestSet, SCL Manager and IED Smart.

ASE 61850 COMMUNICATIONS TESTSET

The ASE 61850 Communications TestSet simplifies access to IEC 61850 environments and devices. It allows easy identification of equipment on the network by either scanning for connected devices or entering specific device network addresses. GOOSE messages and report data from the devices are displayed as received. Individual data nodes may be selected for monitoring, and information from GOOSE, reports, and scans are updated in a single view.

The ASE 61850 TestSet provides a user interface familiar to many of our ASE2000 V2 Communications TestSet product users.

ASE 61850 SCL MANAGER (SUBSTATION CONFIGURATION ENGINEERING MANAGEMENT)

ASE 61850 SCL Manager is a vendor agnostic, comprehensive graphical tool that allows the user to create, configure, view and edit all substation elements, and its data models specified in the IEC 61850 Substation Configuration Language specification.
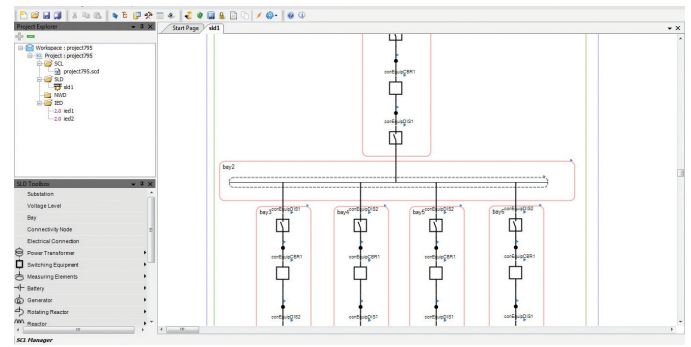
Capabilities and Functions

- Helps create, import and export SCD/SSD/SED/ICD/IID SCL files with SLD Info
- Creates architectures for substations, wind/hydro power plants and Distributed Energy Resources (DER) and defines complete system specifications
- Links different Intelligent Electronic Devices (IEDs) and their logical functions to substation specifications
- Supports IEC 61850 Ed. 1.0 and Ed. 2.0 and allows mapping IEC 61850 signals from one IED to another

Other Features

- Document generator
- Private data management

New features in this release

- Provides tab based view of IED functions for easy browsing - GOOSE, reports, logs, SV, LN data and external inputs
- Restricts operations to ensure conformity with 'Services' supported by IED
- Enhances SLD drawing
- Ed.2.0 based external inputs mapping using Client LN and IEDs information - Reports, GOOSE, SV etc. between IEDs
- Merging of SCL configuration between different versions - approval based Add, Merge and Delete of Configuration

ASE 61850 IED SMART

ASE 61850 IED Smart is a Windows based Software Tool which allows Power System Users to Simulate and Monitor IEC 61850 Server, GOOSE and Sampled Value function. The IED Smart is capable of simulating multiple IEDs (Intelligent Electronic Devices) simultaneously without having real Physical Devices. Each IED in the simulator is configured using standard IEC 61850–6 SCL Configuration Files.
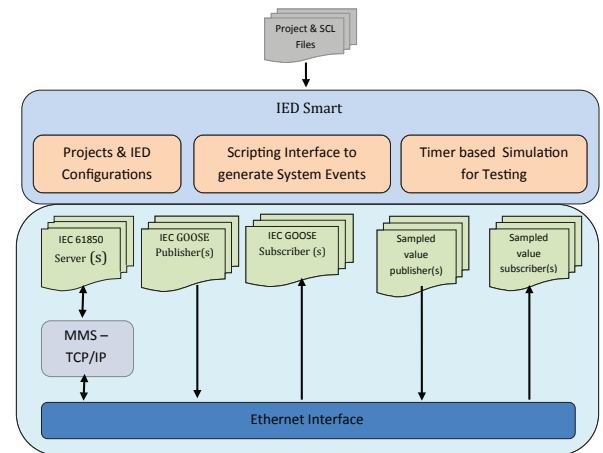
Key Features

- Simulation of standard IEC 61850-6 SCL files
- Supports LNs & CDCs of Substation, Hydro, Wind and DER Models
- Multiple IED Simulation
- Supports all IEC 61850 8-1 Services
- IED Configuration handling as Project Files
- Separate Network and User Configuration for each IED
- Data Simulation with Millisecond Accuracy
- Start, Pause, Stop and Reconfigure options
- Tree based view of Simulation Nodes

Software Requirements

- Microsoft Windows 7, 8, & 10

Hardware requirements

- USB Port for Dongle License
- Ethernet Port

IED Simulator Architecture

ABOUT APPLIED SYSTEMS ENGINEERING

Applied Systems Engineering Inc. (ASE) is a smart grid protocol technology leader and a leading manufacturer of Remote Terminal Unit (RTU)/Intelligent Electronic Device (IED) protocol test equipment for the supervisory control and data acquisition (SCADA) industry. Other products include communication protocol translators, front-end processors, substation alarm annunciators, terminal servers, modems, and source code libraries. Based in Campbell, California, ASE has developed market leading substation protocol test sets for more than 100 substation and industrial protocols, over a 30 year period.

In January 2015, ASE became part of Kalki Communication Technologies Pvt. Ltd. (Kalkitech), a provider of communication and optimization solutions for the Smart Grid. Together Kalkitech and ASE help Utilities move device data securely from field to SCADA Control Centers with our solutions.

Kalkitech works with energy and utility companies providing standards-based solutions that help move data from field to control centre in the areas of Distribution Automation, Substation Automation, Wide Area Monitoring, Advanced Metering and Power Plant Optimization. Kalkitech products include Remote Terminal Units, MicroRTU's, Substation Data Concentrator, Substation Gateway, SCADA Protocol Front End Gateways and IEC 61850 and PMU Solutions. Kalkitech services include consulting, protocol implementation, training, testing and validation. We invest extensively in research and development (R&D), collaborate with leading utilities, and partner with regional leaders across the globe, to provide industry leading technology solutions to our customers in over 70 countries.