DOBLE PROTECTION TESTING

61850 TesT

Protection Testing Software

FOR TESTING IEC 61850-BASED PROTECTION AND AUTOMATION SYSTEMS

Simulate, monitor and test IEDs on your digital substation network with Doble's 61850 TesT Software. Use with Doble's F6150sv and Protection Suite software to apply sampled values (SV) and generic substation event (GSE) simulations to functionally test, receive status messages and get more data from substation devices. Create fault conditions to verify control scheme coordination to ensure proper design of IED logic.
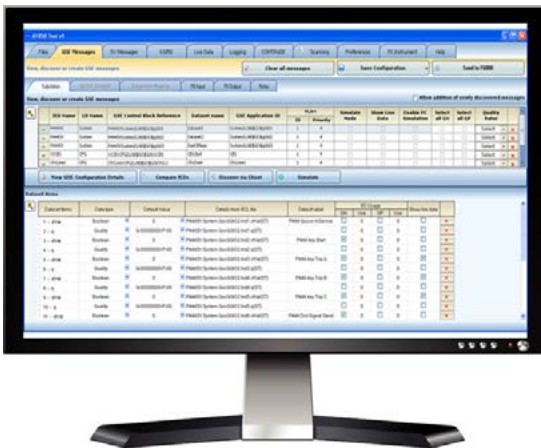
Use 61850 TesT to identify and map logical nodes or objects to virtual inputs on the F6150sv. Then use Doble's Protection Suite testing software to verify compliance of your IEDs with IEC 61850 requirements.

FEATURES

- Loads multiple IEC 61850 substation configurations or various types of SCL files (ICD, IID, CID, SED, and SCD)
- Retrieves and generates IED and SCL files that comply with IEC 61850 parts 6 and 7 (edition 1 or edition 2)
- Browses the IED's data model
- Scans and captures substation network traffic for GSE and SV messages and their datasets
- Logs GSE messages and reports from IEDs; log files can be saved for further analysis later
- PC-based simulator of IEDs for publishing GOOSE messages and client/server reports automatically using scripts, or manually
- Saves GSE and SV signals in COMTRADE format for later viewing and analysis
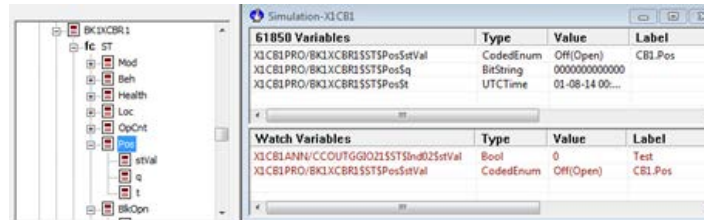
BENEFITS

- Provides a well-organized approach in selecting and defining GSE messages and signals
- Easy-to-use interface for viewing messages and their datasets
- Plan your testing scenarios in a laboratory or offline and use the saved configuration files in the field for efficient testing and commissioning
- Easy modifications in the field can be made for troubleshooting
- Provides better awareness and confidence in the test and test results
- More complete investigation through time aligned view of logged events and data traffic from GSE messages and MMS messages from clients and servers

61850 TesT: A CLOSER LOOK

DATA MODEL OF IEDS AND PC-BASED SIMULATION

Explore the data model of IEDs and select data items for server simulation and client reporting. Use the data models for PC-based simulation and subscription of GSE messages. The use of simple tables allows quick simulation. Scripts allow simulation of more complex testing scenarios including simulation of IEDs to simultaneously subscribe to and conditionally publish GOOSE messages.

CONFIGURATION OF F6150SV FOR GSE TESTING

Select signals for GSE subscription and simulation and map them to the F6150sv virtual inputs and outputs for easy testing of your IEC 61850 design.
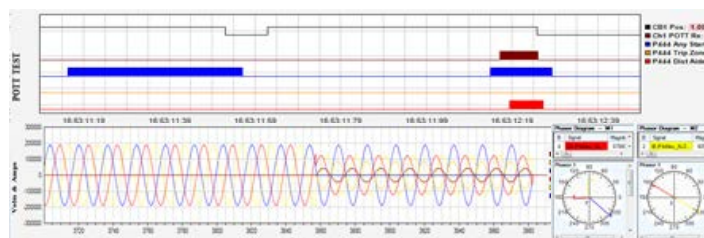

ANNUNCIATOR PANEL AND TABULAR VIEWS OF LIVE DATA

The annunciator panel and signal table provide a clear, real-time visualization of monitored signals and analog data using custom widget-based displays.

GRAPHICAL VIEW OF EVENTS AND WAVEFORMS

Use the graphical oscilloscope view of simulated SV and GSE signals, subscribed signals and client/server report data. The captured signals can be recorded and saved in a standard COMTRADE format. The saved file can be reviewed for more detailed analysis using the COMTRADE Viewer, including Phasor views and derived data tables.

Specifications are subject to change without notice.
Doble is ISO certified.
Doble is an ESCO Technologies Company.
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