

- System Routines - [All]
- NEW SYSTEM ROUTINE
 - 1ST STREET
 - 42ND STREET
 - 57TH STREET
 - 61ST STREET
 - KATY MILLS
 - MEMORIAL STREET
 - MISSION BEND
 - RELAY EXAMPLES
 - SHERIDAN STREET
 - WESTCHASE
 - YALE STREET
 - CHAMBERS SPRING CKT
 - MUSKOGEE TERMINAL
 - ALTERNATE
 - PRIMARY
 - SEL-321.FST
 - ONETA TERMINAL

Relay Testing This Month	Completed	Scheduled
Completed 57	18	

DOBLE PROTECTION SOFTWARE

Comprehensive solutions for verifying system protection

DOBLE ENGINEERING COMPANY



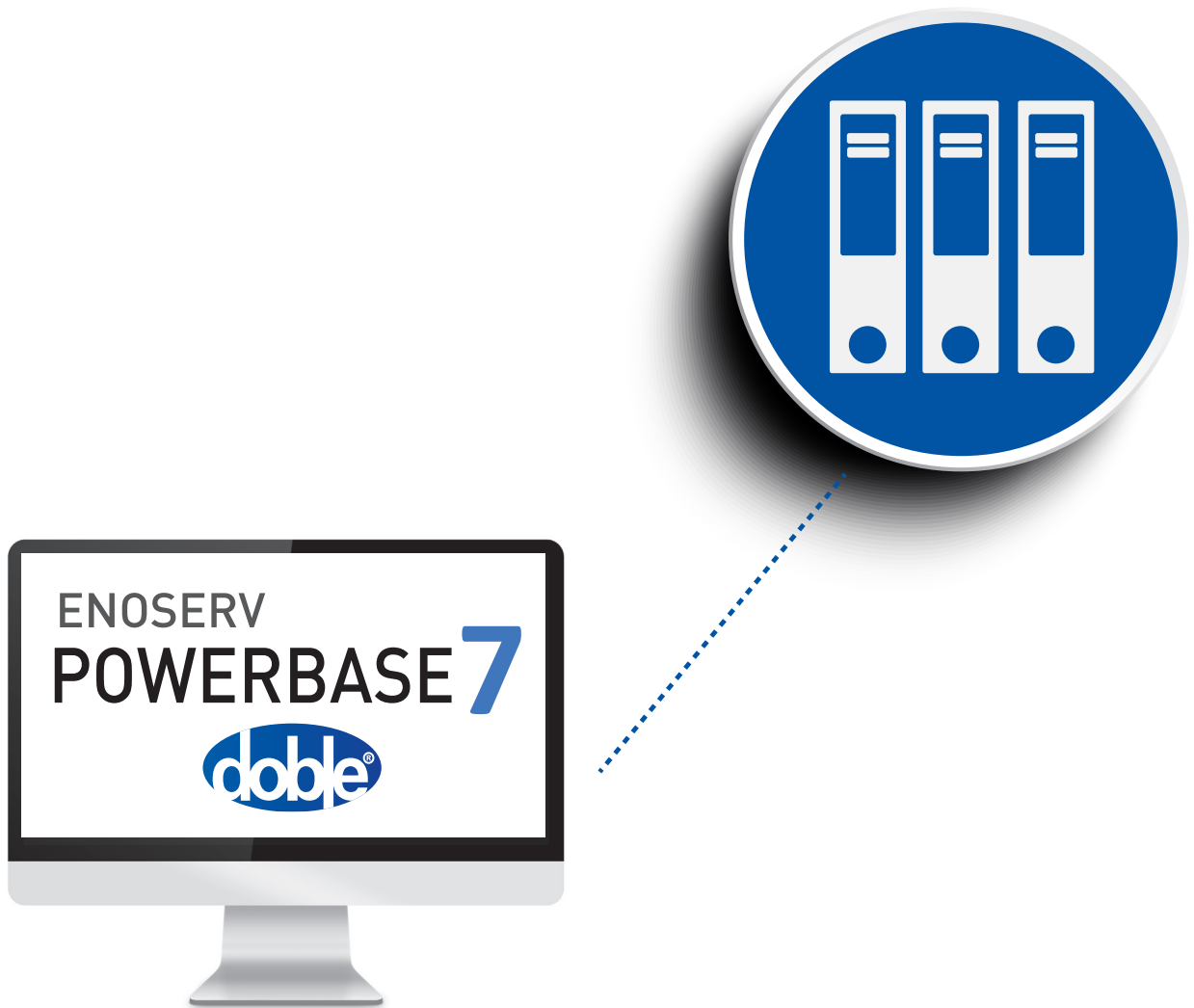
PROTECTION TEST & DATA SOLUTIONS

YOUR WORLD ENHANCED

Whether you are testing electromechanical relays or state-of-the-art, IEC 61850 designs, Doble has the software you need to verify system protection.

Our office and field software options help you verify any protection and control circuit and simulate system conditions. Options are flexible so you can customize your testing program and adhere to your company's practices and procedures, while meeting regulatory requirements.

Choose which combinations make sense for your organization.

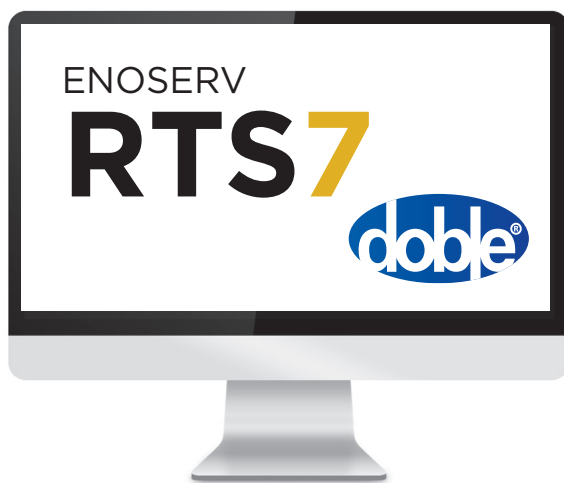


POWERBASE is the time-tested, industry-proven software for tracking work assignments, settings, test routines and test results from RTS and Protection Suite.



OFFICE-TO-FIELD AUTOMATED EXCHANGES

Doble protection software offers limitless testing capabilities and keeps your records organized. Our office software options provide you with up-to-the-moment information and details, at-hand compliance evidence, and thorough analysis for reports. Standardize processes and enjoy increased control over records with the expansive array of test tools and diagnostic techniques of our field software options.



RTS software tests relays and other power system components. RTS merges seamlessly with powerbase.



PROTECTION SUITE offers full spectrum testing with Doble F6 test instruments. Protection Suite files can merge with PowerBase data through the **PB FIELD** module or be uploaded/downloaded with a Protection Suite server database using **PB LITE**.

PROTECTION SOFTWARE SOLUTIONS

PROTECTION ASSET & TEST DATABASE ENOSERV PowerBase

PowerBase is the premier application for administrators to manage and report on protection asset maintenance and engineering records. It helps simplify NERC PRC-005 compliance and trending.

PowerBase is the core piece of your protection testing program: manage your workflows, connect with existing work management systems, automate activities, eliminate manual processes, maintain compliance and optimize efficiency within your organization.

CLIENT/SERVER DATABASE APPLICATION

Numerous workstation computers run PowerBase simultaneously from a single database that operates on a local or Doble-hosted server.

VENDOR-NEUTRAL DATABASE THAT HANDLES ANY POWER SYSTEM ASSET

PowerBase tracks maintenance on relays, CTs/VTs, breakers, transformers, batteries and any other asset. PowerBase features import and export modules for data transfer with other systems and testing tools.

SETTINGS MANAGEMENT WAREHOUSE

PowerBase houses and manages relay settings, allowing you to consolidate settings data from disparate applications, spreadsheets and files.

REPORT ENGINE

PowerBase features a powerful, user-friendly report generator. Reports can be configured to suit your business needs.

COMPLETE PROTECTION ASSET & COMPLIANCE DASHBOARD

Users can easily find information and see a dashboard presenting the whole maintenance picture. This is possible even with many workers and the variety of engineering and testing software products they use.

RELAY DATA CONVERTERS

- ABB
- Alstom
- Areva
- Ametek
- Aspen
- Basler
- Beckwith
- CAPE
- Cooper (Eaton)
- Doble
- GE
- GE Multilin
- GEC
- Schneider
- SEL
- Siemens



RELAY SETTINGS FEATURES

- Customized settings management
- Multiple view/edit/report options
- Listing, archiving, comparisons, range/parameter limiter
- Version-ed files / firmware tracking management
- Association of settings with work orders

Substation Name	FeaType	ID Number	Terminal	Phase	RL Manufacturer	Relay Style/Model	IEEE Code	Last Test Date	Next Test Date	Test Freq	Last Test Result	Prev Test Date	REC Responsible
1ST STREET	HJ	NA	NPR 1 OFF	B PH	VHAABB	2908364A9	877	7/25/2010	7/27/2013	36	PASS	8/14/2007	Yes
1ST STREET	HJ	NA	NPR 2 OFF	C PH	VHAABB	2908364A9	877	7/19/2010	7/14/2013	36	PASS	8/20/2007	Yes
1ST STREET	HJ	NA	NPR 1 OFF	A PH	VHAABB	2908364A9	877	8/14/2010	8/19/2013	36	PASS	7/26/2007	Yes
1ST STREET	HJ	NA	NPR 2 OFF	B PH	VHAABB	2908364A9	877	8/20/2010	8/20/2013	36	PASS	8/20/2007	Yes
1ST STREET	HJ	NA	NPR 1 OFF	C PH	VHAABB	2908364A9	877	8/16/2010	8/14/2013	36	PASS	7/12/2007	Yes
1ST STREET	HJ	NA	NPR 2 OFF	A PH	VHAABB	2908364A9	877	8/17/2010	8/16/2013	36	PASS	7/12/2007	Yes
42ND STREET	HJ	NA	NPR 1 OFF	A PH	VHAABB	2908364A9	877	10/22/2010	10/21/2013	36	PASS	11/19/2007	Yes
42ND STREET	HJ	NA	NPR 2 OFF	C PH	VHAABB	2908364A9	877	11/09/2010	11/27/2013	36	PASS	10/23/2007	Yes
42ND STREET	HJ	NA	NPR 1 OFF	C PH	VHAABB	2908364A9	877	11/11/2010	11/10/2013	36	PASS	11/28/2007	Yes
42ND STREET	HJ	NA	NPR 2 OFF	B PH	VHAABB	2908364A9	877	10/22/2010	10/22/2013	36	PASS	11/11/2007	Yes
42ND STREET	HJ	NA	NPR 1 OFF	A PH	VHAABB	2908364A9	877	10/22/2010	10/22/2013	36	PASS	11/11/2007	Yes
1ST STREET	CO-0	NA	NPR 1 BU	ALARM	VHAABB	1875232A	5651	11/18/2010	11/9/2013	36	PASS	11/27/2007	Yes
1ST STREET	CO-0	NA	NPR 1 BU	ALARM	VHAABB	1875232A	5651	7/21/2010	7/20/2013	36	PASS	8/17/2007	Yes
1ST STREET	CO-0	NA	NPR 1 BU	ALARM	VHAABB	1875232A	5651	8/14/2010	8/13/2013	36	PASS	7/6/2007	Yes
1ST STREET	CO-0	NA	NPR 2 BU	A PH	VHAABB	1878043A	5651	7/30/2010	7/29/2013	36	PASS	8/16/2007	Yes
1ST STREET	CO-0	NA	NPR 1 BU	QND	VHAABB	1875266A	5651	7/8/2010	7/6/2013	36	PASS	7/30/2007	Yes
1ST STREET	CO-0	NA	NPR 1 BU	B PH	VHAABB	1878043A	5651	7/21/2010	7/20/2013	36	PASS	8/7/2007	Yes
1ST STREET	CO-0	NA	NPR 1 BU	C PH	VHAABB	1878043A	5651	7/20/2010	7/10/2013	36	PASS	7/21/2007	Yes
1ST STREET	CO-0	NA	NPR 1 BU	QND	VHAABB	1875266A	5651	7/11/2010	7/20/2013	36	PASS	8/17/2007	Yes
1ST STREET	CO-0	NA	NPR 1 BU	A PH	VHAABB	1878043A	5651	8/7/2010	8/6/2013	36	PASS	7/20/2007	Yes
1ST STREET	CO-0	NA	NPR 1 BU	B PH	VHAABB	1878043A	5651	7/12/2010	11/11/2013	36	PASS	7/21/2007	Yes
1ST STREET	CO-0	NA	NPR 2 BU	C PH	VHAABB	1878043A	5651	8/17/2010	8/16/2013	36	PASS	7/12/2007	Yes
42ND STREET	CO-0	NA	NPR 1 BU	B PH	VHAABB	1875267A	5651	10/18/2010	10/17/2013	36	PASS	11/16/2007	Yes

DATABASE OF ALL ASSETS

TEST MANAGEMENT FEATURES

- FasTypes for linking multiple defined procedures to a single asset type
- RTS import/export data converter
- PB Field module for import/export conversions of Protection Suite data
- Pseudo devices user-defined ancillary asset types used for functional test or inspection data capture
- Merge Utility and PB Live Testing for database-to-database transfers with RTS and PB Field
- Email Module distributes notifications when database updates occur

GROUP	NAME	RANGE	FORMAT CODE	SETTING	COMMENTS
0	RELID			138KV MT120 INTER	
0	TRMID			PHARR LINE MERETT SL	
0	Z1MAG			0.35	
0	Z1ANG			74.24	
0	Z0MAG			1.08	
0	Z0ANG			78.21	
0	LOCAT			Y	
0	LL			2.19	
0	CTR			7401.0	

Settings Status

Pending Completed
 Deployed Approved
 Tested Historical

General Setting Comment
 ELEMENT 56G1 FOUND TO OPERATE AT 7% UNDER ACTUAL SETTING. THIS IS TYPICAL FOR ALL 56G ELEMENTS OF THE SEL-321 RELAY. SET AT THE MINIMUM VALUE OF 0.500 AMP.
 TOLERANCES FOR THE 56G1 WERE LEFT AS +/- 5%, SO THE TEST WAS GIVEN A FAIL, BUT THE OVERALL ROUTINE WAS GIVEN A PASS AS THE ACTUAL OPERATION VALUE IS EXPECTED BASED ON PREVIOUS TESTING PRACTICES OF THE SEL-321.

RELAY SETTINGS MANAGEMENT

TEST RESULT FEATURES

- As-Found / As-Left / Pass / Fail
- Aggregate results trending of individual assets or populations
- Report Generator - query database tables using custom statements or defined reports types

New Results

Substation Name	Terminal	ID Number	Relay Type	Last Test Date	Last Test Res.
1ST STREET	FDR V-2	R-119336	CO-9	6/28/2016	FAIL
1ST STREET	FDR V-2	R-119337	CO-9	6/28/2016	PASS
42ND STREET	BKR 300	R-120359	SEL-421	4/27/2016	FAIL
1ST STREET	BKR 101	R-11930382	CO-8	4/12/2016	PASS
1ST STREET	BKR 101	R-119304012	CO-9	4/12/2016	PASS
1ST STREET	TEST	R-119303926	CO-9	3/31/2016	PASS
1ST STREET	FDR V-1	R-119303970	CO-8	3/30/2016	PASS
1ST STREET	FDR V-1	R-119303974	CO-8	3/30/2016	PASS
MEMORIAL STREET-PALMHURST LINE	R-124427	SEL-351		3/4/2016	FAIL
1ST STREET	FDR V-1	R-119302	CO-11	12/1/2015	PASS
1ST STREET	FDR V-1	R-119354	CO-9	11/16/2015	PASS
1ST STREET	FDR V-1	R-119303974	GE - L90	11/12/2015	

Yearly Workorder Status

Completed 82.04%
Open 17.96%

Relay Testing This Month

Completed 37
Scheduled 18

Test Percent Error

Plot of % Error

CUSTOMIZED DASHBOARDS TO TRACK DATA

WORK MANAGEMENT FEATURES

- Work Assignment Interface that integrates into your corporate work processes
- Auto-triggering / auto-messaging as tasks occur
- Integration with multiple WMS/CMMS platforms (SAP, Maximo, Cascade, etc.)
- Customizable Dashboard



Assemble RTS routines of your own design or use any of the hundreds of pre-built routines available from the RTS database.

RTS ROUTINES

- Build your processes into RTS routines
- Link routines to individual assets in your system
- Gain advantages of uniformity of testing, bulk edits, aggregate reporting and simplified records control

TEST ROUTINE DEVELOPMENT TOOLS

Step-by-step test builder

- Steady-state element tests
- Dynamic-state scheme/logic tests
- End-to-end communications tests

Forms package

- Build custom data entry forms
- Manage and preserve instituted forms
- Gather results from 3rd-party software

BASIC scripting engine with pre-written RTS commands

	Basic	Pro
Forms Package	✓	✓
PowerBase Live Testing	✓	✓
Routine Protection Options	✓	✓
Simulate Mode	✓	✓
Steady State Test Operations		✓
Modbus Module		✓
Manual Control Interface		✓
Dynamic State Test Operations		✓
Comtrade Playback		✓
Transducer Test Interface		✓

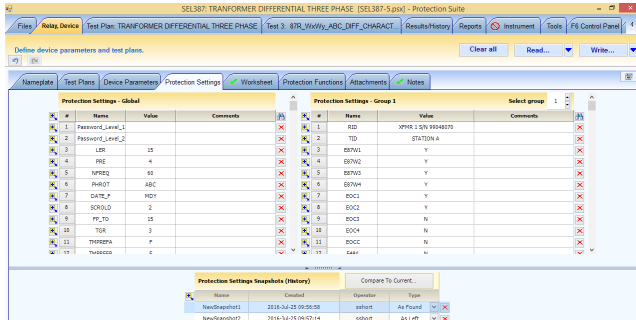
RTS Pro keys are upgraded with drivers that support numerous manufacturers' test instrument RTS is keyed software (USB dongles / software code keys) with two user levels: Basic (manual only) and Pro (full test set control).

TESTING TOOLS

- Manual control interface
- State sequencer
- Terminal-terminal line modeler
- COMTRADE playback
- MODBUS module
- File importers

	Doble		Manta		ISA	Megger				Omicron	SMC	
Supported Test Sets →	F6000 series	F2000 series	MTS-5000 series	MTS-1700 series	DRTS series	SMRT series	MPRT series	Pulsar	Epoch series	CMC / CMA series	Mentor	PTE Range
RTS Manual Control	✓	✓	✓			✓	✓	✓		✓		
Steady State	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Dynamic State	✓	✓	✓			✓	✓			✓	✓	
Comtrade Playback	✓		✓			✓	✓			✓		
Transducer	✓		✓			✓	✓			✓	✓	

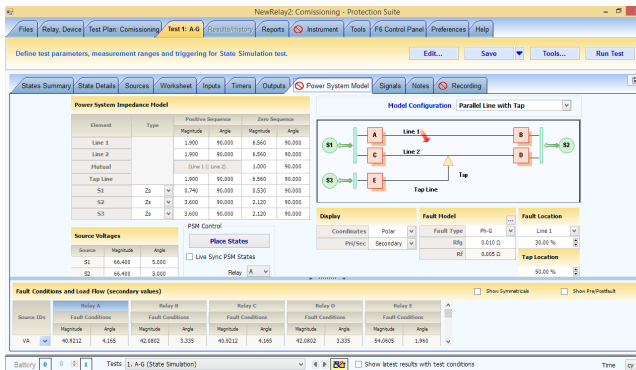
RTS Pro keys are upgraded with drivers that support numerous manufacturers' test instruments



IMPORT RELAY SETTINGS



RUN SPECIALIZED TESTS



POWER SYSTEM MODELS

Protection Suite

Protection Suite software is a complete, no-compromise, protection testing solution. Run manual and automated tests for protection-scheme verification, including IEC 61850 sampled values and GOOSE schemes.

With changes in technology, you need a software tool that allows you to test old and new types of devices. Protection Suite is your solution with its time-tested static, dynamic and digital test routines. Quickly create tests with the basic wizard tool and power system models.

Protection Suite offers users the capability to control and manipulate test types, giving users multiple ways of testing and proving a device. Simulate realistic system conditions and power quality issues, such as flicker and harmonic inrush, using the transient wave generator.

Protection Suite is used with Doble's F-series test equipment; it also connects with PowerBase to create a comprehensive data-management system for storing, trending, system planning analysis and for reporting to regulatory agencies.

Protection Suite is available in a number of levels. Mix and match the levels that are appropriate for your organization's testing and reporting requirements.

SV Source Set	SV Source Set 2	SV Source Set 1	SV Source Set 3
Label/Suffix	S2	S1	S3
ED Name	DOBL	MSJ	MSJ
Destination MAC Address	01:8C:CC:34:0:2	01:8C:CC:34:0:1	01:8C:CC:34:0:1
Application ID (Hex)	4000	4000	4000
VLAN ID	9	9	9
VLAN Priority	4	4	4
VLAN CFE			

1850 Test must be setup in General Preferences

IEC 61850 COMPLIANT TESTING



RECORDS MANAGEMENT

PB Lite

- Network server database for control and reporting of Protection Suite .PSX files
- Nameplate, test plans and results
- Doble F-Series instrument firmware
- Secured records / compliance evidence
- Workflow tracking; download/assign capabilities
- Recommended for small-to-medium sized teams with limited administrative resources
- Available with Protection Suite v.4.4.1 and v.5.0

PB Field (PowerBase)

- Connects Protection Suite software to the PowerBase database system.
- Collates Protection Suite .PSX files into PowerBase relay records for managed office-to-field exchanges
- Non-disruptive: keeps existing Protection Suite macros in place
- Available with Protection Suite v.4.4.1 & v.5.0 with PowerBase v.7.1

TEST CREATION WIZARD

Device parameters and selections for guided creation of tests. Protection Suite offers multiple testing techniques:

- Import settings and characteristic files (xrio, rio, csv, urs, txt)
- Basic Instrument Controls: control panel / battery simulator / waveform recording
- Instrument Calibration with F6 accessories
- Documentation: create data entry/information used in manual operation and data collection
- Steady State / Dynamic State / State Simulation / Transient playback/creation: industry standard test techniques
- Specialized Applications: enables advanced techniques for Harmonic Ramp, Phasor Measurement Unit (PMU) Tests, CT/VT Testing, Rate of Change of Current, Rate of Change of Frequency, Rate of Change of Voltage
- Transducer/Metering: analog and digital device tests
- Protection Suite Tools: scripting, data conversion, settings templates

Feature ↓	License →	Control Panel	Calibration	Basic	Advanced	Professional
Basic Instrument Controls		✓	✓	✓	✓	✓
Instrument Calibration			✓		✓	✓
Data Entry / Information				✓	✓	✓
Test Steps Developer						✓
Steady State Tests			✓		✓-	✓+
Dynamic State Tests					✓	✓
State Simulation				✓	✓	✓
Transient Playback				✓	✓	✓
Specialized Applications					✓	✓
Transducer/Metering				✓	✓	✓
PB Lite					✓	✓
Administrator Tools					✓	✓
PB Field (PowerBase)					✓	✓

- limited steady state test types

+ expanded steady state test types PowerBase v.7.1

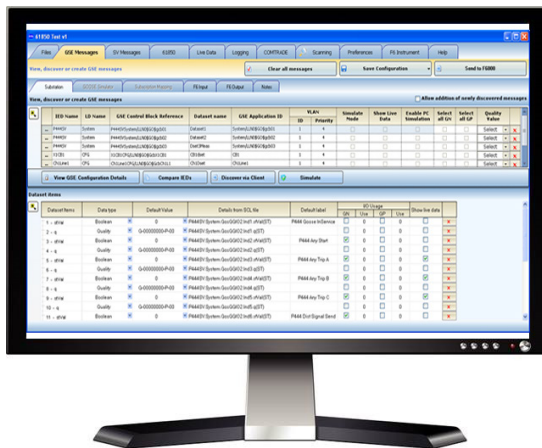
FOR TESTING IEC 61850-BASED PROTECTION AND AUTOMATION SYSTEMS

61850TesT

Simulate, monitor and test IEDs on your digital substation network with Doble's 61850TesT 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 61850TesT to identify and map logical nodes and objects to virtual inputs on the F6150sv. Then use Doble's Protection Suite testing software to verify correct operation and performance of your IEC 61850-based protection, automation and control schemes.

FEATURES

- Loads multiple IEC 61850 substation configurations or various types of SCL files (ICD, IID, CID, SED, and SCD)
- Discovers the IED's data model and configuration and generates SCL files
- Built-in Client Simulator browses the IED's data model and allows read/write actions on their values; displays and updates selected data in watch windows
- Client controls switching devices and simulation and testing modes of IEDs
- GSE support includes GSSE, GOOSE, and Routable Goose
- Scans and captures substation network traffic for GSE and SV messages
- Logs GSE messages and reports from IEDs. Log files can be saved, and a time-aligned display of events facilitates analysis
- PC-based simulation of IEDs for publishing and subscription of GOOSE and R-GOOSE messages manually or automatically using scripts
- Displays live data in various display formats - tabular, annunciator and graphs. Oscillographs of GSE and SV signals are saved and can be viewed and analyzed further with the COMTRADE viewer.



BENEFITS

- Provides a well-organized approach in selecting and defining GSE messages and signals for use in testing and visualizing
- 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
- Provides complete functionality with enhanced visualization required for efficient and secure testing IEC 61850-based protection and control schemes



61850TesT: A CLOSER LOOK

CLIENT/SERVER AND SIMULATION

Browse the data model of IEDs and select data items. The Client simulator allows you to read current values and you can write or change the values of certain items. Create watch lists of selected items for automatic updating of display values. Control and set IED modes for simulation and behavior, such as test-blocked. Control circuit breakers based on their control model such as select-before-operate and verify the interlocking and synch-check logic. The Server simulator allows you simulate multiple IEDs to automatically publish GOOSE messages. Change the values of selected items manually or semi-automatically with a table of selected items with their prescribed values for quick simulation. Scripts allow simulation of more complex testing scenarios including simulation of IEDs to simultaneously subscribe and publish GOOSE messages conditionally based on implemented logic.

The Client Simulator interface displays a tree view of IEDs on the left and a data table on the right. The data table shows columns for Data Name, Data Description, Value Description, Value, and Type. The watch window below shows a list of monitored data items with their current values and data types.

The Control window features a 'Filters' section with radio buttons for 'Switch/Breaker', 'Mod', and 'All'. A large red box displays the status 'true'. Below this, there are fields for 'Current Status', 'Mod', 'Beh', and 'Command Value', along with 'Operate' and 'Cancel' buttons.

CONFIGURATION OF F6150SV FOR GSE TESTING

Select signals from the Substation section for GSE subscription and simulation. Map these signals to the F6150sv virtual inputs and outputs for easy testing of your IEC 61850 design.

F6 Instrument	ID	Label	Details from SCL file	GSE control block reference	Dataset name	GSE application ID	Item no.	Data type	Compare	Value
F6150sv	GN1	Dist TRIP	ProtDis.DisPT	LINE1System/LL	Ds1_FCDA	LINE1System	1	Boole	=	1
F6150sv	GN2	PTOC Trip	ProtOvCur.Oc	LINE1System/LL	Ds1_FCDA	LINE1System	11	Boole	=	1
F6150sv	GN3	CB1 Pos	ChCB1.CB1X	LINE1System/LL	Ds1_FCDA	LINE1System	13	Code	=	2 (10)

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. Identical signals from real IEDs and signals from the test set and other simulators can also be viewed simultaneously.

The Annunciator Panel displays three signal indicators, each with a green background and white text. Below each indicator is a 'False' label and a numerical value (000000000000).

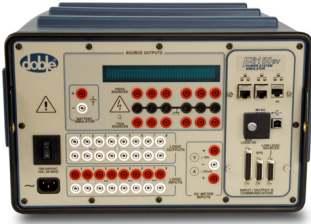
GRAPHICAL VIEW OF EVENTS AND WAVEFORMS

Use the graphical oscilloscope to view SV and GSE signals, and client/server report data. Triggers based on GOOSE and specified SV thresholds or value changes initiate automatic recording and saving in COMTRADE file format. The saved file can be reviewed for more detailed analysis using the COMTRADE Viewer, including phasor views and derived data tables.

The Tabular view shows a table of GSE signals with columns for Source MAC Address, Sim..., GSE control block..., Dataset..., It..., GSE ap..., SCL Details, Data type, Label, Value, Time of last value change, and Las... The graphical view shows a waveform plot of 'Amplitude' vs 'Time in ms' with a phasor diagram and a 'Delta Values' table.

Chart	Signal (filename)	Time	Inst. Value	RMS
Chart1	S1P TRIP-Goo	23.794	-1	-1
Chart2	S0BF RETRIP	23.794	-1	-1
Chart3	S0BF TRIP-G	23.794	-1	-1

PROTECTION HARDWARE



F6150sv*
Power System Simulator



F6350e
External Amplifier



F6052
Universal Time Synchronizer



DUC
Doble Universal Controller



F6080
Field Calibration Unit

Doble's F-Series power system simulators are the industry's trusted diagnostic device for protection testing.

Testing requirements can vary from team to team and company to company.

That's why Doble's F-series power system simulators are customizable. Choose what functions you need in order to perform testing of protection devices and schemes.

You can maximize your testing capabilities with accessories for communication, amplification, calibration and more.

From manual testing through to high burden testing, choose the options and accessories that make sense for your budget and business requirements.

**The F6150sv is UCAIUG IEC 61850 certified Level A by DNV-GL for:
- IEC 61850 Server (GOOSE Publisher/Subscriber), Editions 1 and 2
- IEC 61850 Sampled Values 9-2LE Publisher, Edition 1*



PROTECTION TRAINING

We offer a wide range of protection training courses that will help prepare you for a modern grid, power plant and industrial facility. Classes are geared towards engineers, technicians, supervisors and managers who are involved with protection assets. Choose which courses are right for you and your team.

Learn more at events.doble.com/protection

PROTECTION SUITE RELATED COURSES

- Protective Relaying Application & Testing
- Generator Protection Application & Testing
- Essentials of Protection - Beginners Course for Technicians
- Basic Hands-on Application & Testing Electro-Mechanical and Microprocessor Relays
- Intermediate Hands-on Application & Testing Electro-Mechanical and Microprocessor Relays
- Advanced Hands-on Application & Testing Electro-Mechanical and Microprocessor Relays

61850 TEST TRAINING

- IEC 61850 Application & Testing

RTS COURSES

- RTS Essentials Training
- RTS Developer Training
- RTS Advanced Developer Training

PROTECTION THEORY COURSES

- Basics of Protection for Industrials
- Basics of Protection for Utilities
- Substation Maintenance
- Schematic Electrical Print Reading
- Fault Calculation and Symmetrical Components
- Harmonics Simplified

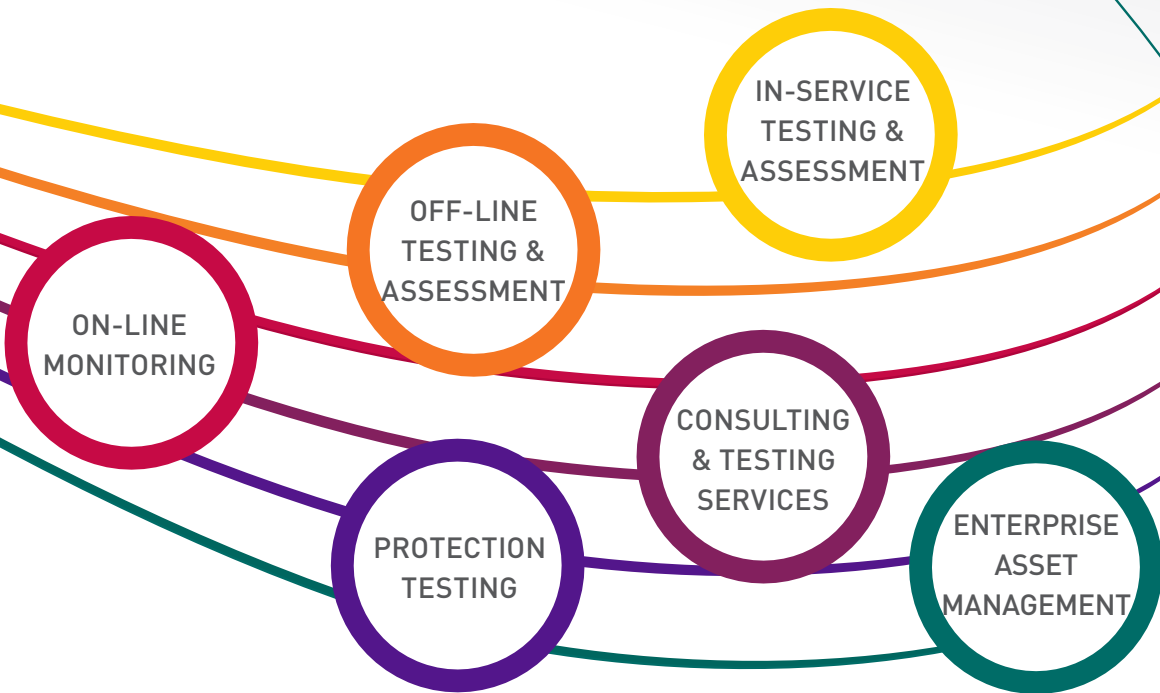
PROTECTION SERVICES

Access consultation and application support from a team of experienced protection engineers. Our protection experts have extensive practical experience throughout the industry, from the field to administration at both large and small utilities, as well as at relay OEMs. Contact a member of the Doble team to find out more about how we can assist you throughout your transmission, distribution and generation applications.

PROTECTION EVENTS

Doble offers a variety of protection-related training courses and seminars throughout the year. The annual Doble Protection Seminar features PowerBase, RTS, Protection Suite and 61850 Test training and user group meetings, along with technical presentations on protection topics and an Industry Expo. Other options include the Australasian Protection Testing Users Group (APTUG) Meeting, protection training courses, web-based training, and on-site training tailored to your team.

OPTIMIZE OPERATIONS WITH DOBLE'S RANGE OF DIAGNOSTIC SOLUTIONS



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