



PRODUCT OVERVIEW

61850
EASY

A horizontal decorative bar with a blue gradient and light streaks.

monitor|diagnose|troubleshoot|test|simulate



INTRODUCTION

61850easy is an IEC 61850 Test Tool solution that allows users to monitor, diagnose, troubleshoot and simulate messages over an IEC 61850 network. 61850easy, as a vendor independent tool, addresses inherent protocol complexities and simplifies them into an understandable and easy to use format for all users.

61850easy is available in two primary formats:

61850easy

The 61850easy software comes pre-installed onto a small form factor desktop PC

61850easy VIRTUAL

61850easy VIRTUAL enables users to install the 61850easy software onto any Windows based operating system capable of utilizing VMware Player

Once a user has selected their preferred format, they can also choose the functionality package to suit their individual requirements and applications:

- 61850easy Test Set
 - A complete test set solution with access to all functionality
- 61850easy Core Package
 - An entry level testing solution with the ability to add-on extra functionality packages:
 - GOOSE Publisher Package Add-On
 - MMS Services Package Add-On

61850easy eradicates the myth that the configuration and usage of an IEC 61850 based substation automation system can only be achieved by communication protocol experts. Through leading edge technology and world class development, 61850easy enables test engineers to visualise and simulate traffic in an IEC 61850 system.

WHY IEC 61850 AND 61850easy?

61850easy IS SUITABLE FOR:

- Testing of IEC 61850 based systems, in a laboratory environment – FAT & SAT applications
- Design and functional testing of IEC 61850 systems
- Commissioning of IEC 61850 based systems
- Verification of server implementations
- Learning the IEC 61850 standard
- Demonstrations of IEC 61850 IEDs
- Training & education purposes

TOP LEVEL CORPORATE BENEFITS:

- Reduce project execution duration in configuration and testing phases
- Increase the efficiency of client site commissioning actions
- Improve quality of IEC 61850 engineering activities
- Increase knowledge in IEC 61850 standards and implementation
- Significantly reduce wiring complexity
- Reduce footprint of site/substation installation
- Cost reduction in IEC 61850 architecture, design and implementation
- Improve profitability

TOP LEVEL SOFTWARE BENEFITS:

- Open communication – Full benefits of using a mainstream communication technology such as Ethernet
- Integrated protocols to provide real time monitoring applications
- A standardised object model that supports logical location of data and device functions
- Standardised data naming conventions
- Common syntax and semantics
- Common configuration control through SCL
- Minimal manual configuration is required for the client applications and devices, reducing errors and lowering commissioning costs



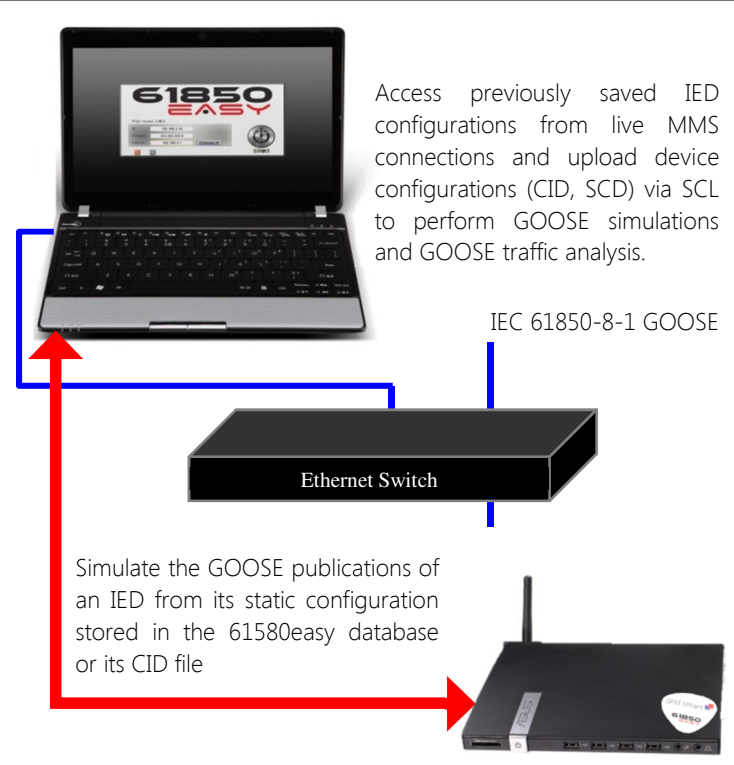
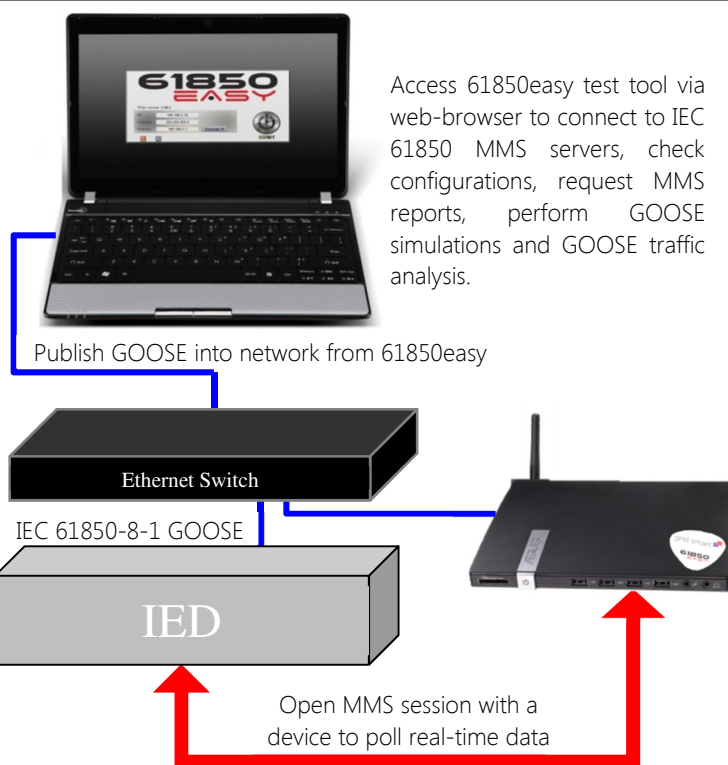
61850easy SOFTWARE FEATURE

- Self-discovery
- MMS Read/Write
- MMS Client
 - Live MMS Reports (Buffered & Unbuffered)
 - MMS Discovery
- GOOSE Publisher & Subscriber
 - Individual GOOSE Simulation
 - Simulation of an IED's configured GOOSE traffic
 - GOOSE Sequencer (create, play and record triggered sequences)
 - GOOSE Live Analysis (Filtering by DataSets, Data Attributes, Events)
- Analyzer for archiving, searching and analysing GOOSE and MMS Reports
- Supports use of VLANs and priority tagging
- Multivendor interoperability
- Embedded Tools

THE TECHNOLOGY

- WEB based tool – ready to use instantly
- Composed of two modules:
Server and Client
- **61850easy Server**
 - Running core software on Linux (Ubuntu) platform
 - Available as 61850easy pre-installed on a small form factor PC or 61850easy VIRTUAL which can be installed by users on their own compatible devices
 - Connected to IED's network
- **61850easy Client**
 - Rich Internet Application (RIA) built on Adobe Flash platform
 - Initiated from PC browser connected within the server network or remotely using VPN

TESTING ENVIRONMENTS WITH 61850easy USING LIVE CONNECTIONS OR SCL FILES



61850easy FORMATS



**61850
EASY
VIRTUAL**

61850easy VIRTUAL

61850easy VIRTUAL is available to users who wish to install a 61850easy Software Package onto their own PC/laptop or other compatible device. The virtual package removes the need for an additional hardware device and enables the easy installation of the software onto Windows based operating systems through compatible VMware platforms.

61850easy VIRTUAL – MINIMUM DEVICE REQUIREMENTS

- Windows OS and compatible with the installation of VMware Player
- Minimum of 20GB of storage allocation from host device for Virtual Machine
- Standard Disk Drive
- 2 x USB2.0 Ports

Please note that 61850easy VIRTUAL packages are not recommended for testing applications with large SCD files or high volumes of GOOSE traffic capture & storage

61850easy

The 61850easy comes pre-installed by Grid Smart onto a small form factor PC. This dedicated test set resource provides the ability to carry out long term testing and monitoring using the devoted storage and processing facilities offered by the integrated hardware. This format also offers practical multiple user access where additional licences can be purchased by the user.



KEY 61850easy HARDWARE FEATURES:

- Intel® Atom™ D2550 Dual-Core Processor 1.86GHz
- DDR3-1066Mhz 2GB (up to 4GB)
- 320GB SATAII Hard Disk
- 4 x USB2.0 & 2 x USB3.0 & 1 x 4 -in-1 Card Reader
- 1 x HDMI out & 1 x D-Sub out
- 1 x Ethernet LAN RJ-45 10/100/1000Mbps
- 19Vdc, 3.42A, 65W Power adapter
- Weight – 0.7kg (1.54lb)
- Dimensions – 219mm x 172.5mm x 29mm (8.6" x 6.8" x 1.1")

**61850
EASY**

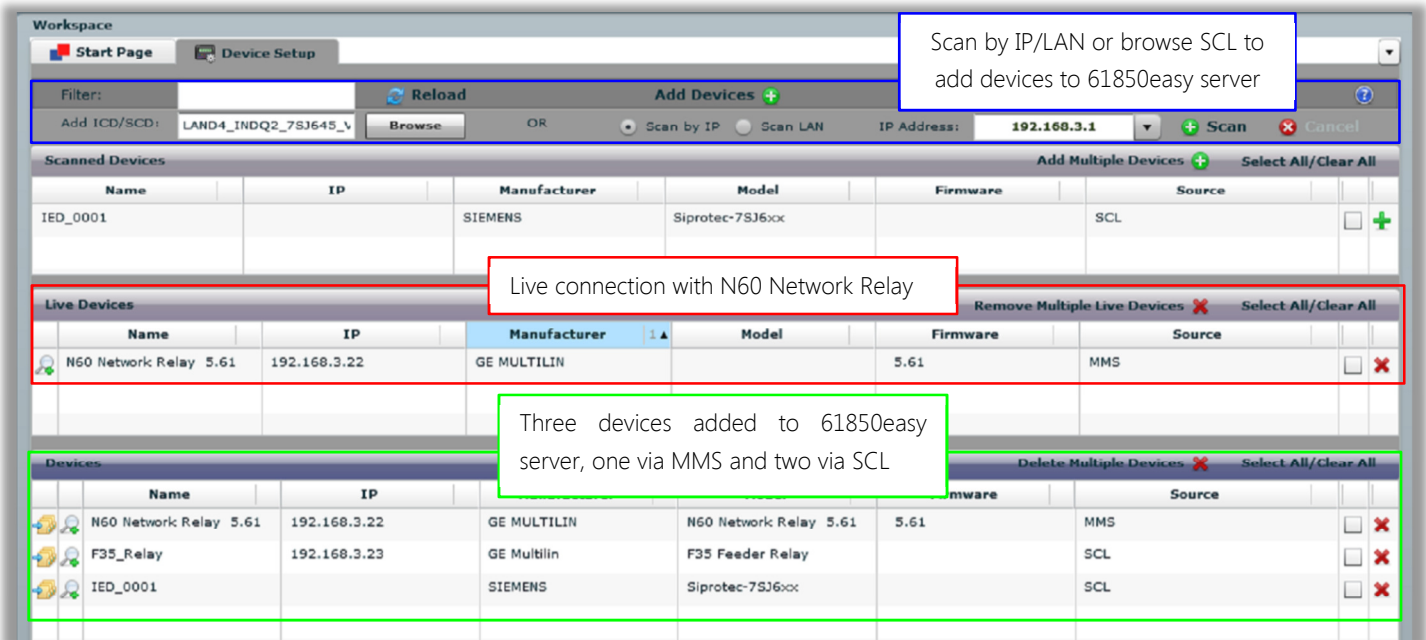
61850easy PACKAGES

61850easy CORE PACKAGE

Setup & Management

- Easy UI's and navigation
- User management of hardware resources and database/storage
- Add preconfigured or live devices to the 61850easy Server:
 - Via SCL or MMS Client respectively
 - Via scanning the LAN/IP for live devices using MMS Client
- Browse any IEC 61850 GOOSE Server and associated GOOSE Control Blocks, by adding devices to the 61850easy Server
- Save/Load user workspace(s)
- The GOOSE Connections viewer provides an interactive GUI showing the publishing and subscribing devices from an imported SCD file

ADDING DEVICES – ADD DEVICES VIA MMS CLIENT AND SCL



Scan by IP/LAN or browse SCL to add devices to 61850easy server

Live connection with N60 Network Relay

Three devices added to 61850easy server, one via MMS and two via SCL

Name	IP	Manufacturer	Model	Firmware	Source
IED_0001		SIEMENS	Siprotec-7SJ6xx		SCL
N60 Network Relay	192.168.3.22	GE MULTILIN		5.61	MMS
F35_Relay	192.168.3.23	GE Multilin	F35 Feeder Relay		SCL
IED_0001		SIEMENS	Siprotec-7SJ6xx		SCL

GOOSE Subscriber

- Capture all GOOSE traffic in the selected network (including Fixed GOOSE) and monitor live traffic with flexible views and smart filters to show:
 - GOOSE Live capture
 - GOOSE DataSets Live (user-definable)
 - GOOSE Events Live
 - GOOSE Live 'Test' traffic
 - Live Capture of Simulated GOOSE traffic
 - Advanced device data mapping of GOOSE traffic utilising devices added to the 61850easy Server
 - Export Live GOOSE packet capture to XML or CSV file format
 - Capture and diagnose incorrectly configured GOOSE messages

GOOSE EVENTS LIVE CAPTURE – FILTER DOWN TO SPECIFIC EVENTS OF A DEVICE

Select which device and other filters you wish to use

View key data from the filtered GOOSE events

Device Name	GOOSE	Data Name
F35_Relay	F35_GOOSEOut_1	F35_Relay/Demo/GGIO1\$ST\$Ind1\$stVal
N60 Network Relay 5.61	N60_GOOSEOut_1	N60_RelayDemo/GGIO1\$ST\$Ind1\$stVal

Details	GOOSE goID	Data Name	Data Source	Data Type	Value	sqNum	stNum	Easy Time
F35_GOOSEOut_1	F35_Relay/Demo/GGIO1\$ST\$Ind1\$stVal	CONTROL PUSHBUTTON 1 ON	BOOLEAN	false	0	7	2012-03-26 11:44:40.311392	
F35_GOOSEOut_1	F35_Relay/Demo/GGIO1\$ST\$Ind1\$stVal	CONTROL PUSHBUTTON 1 ON	BOOLEAN	true	0	6	2012-03-26 11:44:40.311392	
N60_GOOSEOut_1	N60_RelayDemo/GGIO1\$ST\$Ind3\$stVal	CTRL PUSHBUTTON 3 ON	BOOLEAN	false	0	27	2012-03-26 11:44:40.311392	
N60_GOOSEOut_1	N60_RelayDemo/GGIO1\$ST\$Ind3\$stVal	CTRL PUSHBUTTON 3 ON	BOOLEAN	true	0	26	2012-03-26 11:44:40.311392	

Drill down into the GOOSE packet details

Title	Value	Ind.	Bin.	Dec.	Hex.
Ethernet		0	00000001	001	01
Destination MAC	01:a0:f4:04:12:cc	1	10100000	160	a0
Source MAC	00:a0:f4:04:12:cc	2	11110100	244	f4
Type	VLAN	3	00000100	004	04
VLAN		4	00010010	018	12
Priority Code Point	4	5	11001100	204	cc
Canonical Format Indicator	No	6	00000000	000	00

GOOSE Publisher

- Create and simulate individual GOOSE packets using the GOOSE Publisher:
 - Emulate a packet from a live device
 - Create network traffic for end to end testing
 - Test live device(s) setup and configuration

SEND GOOSE PACKETS – DEFINE ALL PARAMETERS, ADD VALUES AND SEND YOUR GOOSE

Build the DataSet

DataSet No	Data Type	Value
1	Float	3
2	Boolean	true
3	Dbpos	01
4	Quality	00000000000000

Edit the frame header

Choose, edit and add DataSet elements

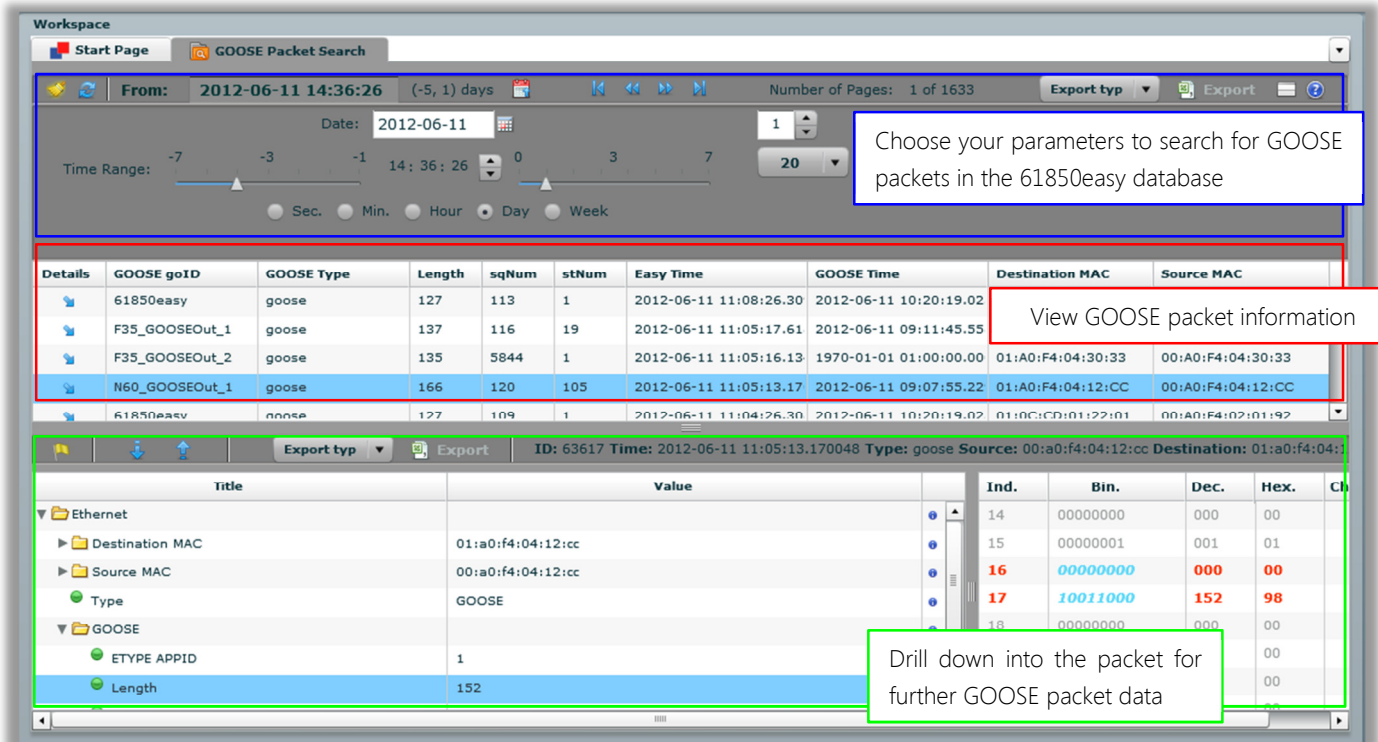
Parameter	Value
Source MAC	00:0C:CD:01:22:01
VLAN Priority Code Point	0
VLAN Identifier	0
GOOSE ETYPE APPID	0
GOOSE gocbRef	IEDNameLDInst/LLN0\$GO\$gcb01
GOOSE timeAllowedToLive	45000
GOOSE datSet	IEDNameLDInst/LLN0\$GOOSE1
GOOSE goID	61850easy
GOOSE stNum	0
GOOSE sqNum	0
GOOSE test	true

DataSet Element	Value
Float	3
Boolean	true
Dbpos	01
Quality	Good
Validity	false
Overflow	false
OutOfRange	false
BadReference	false
Oscillatory	false

GOOSE Analyzer

- Provides access to archived GOOSE packets with enhanced search facilities and smart filters:
 - Advanced device data mapping of GOOSE traffic utilising devices added to the 61850easy Server
 - Access all archived GOOSE traffic
 - Export filtered data to XML or CSV file format
 - Export archived packets to XML or CSV file format

GOOSE ANALYZER PACKET SEARCH – SEARCH FOR PACKETS WITHIN USER DEFINED TIME RANGES



Choose your parameters to search for GOOSE packets in the 61850easy database

Details	GOOSE goID	GOOSE Type	Length	sqNum	stNum	Easy Time	GOOSE Time	Destination MAC	Source MAC
	61850easy	goose	127	113	1	2012-06-11 11:08:26.30	2012-06-11 10:20:19.02		
	F35_GOOSEOut_1	goose	137	116	19	2012-06-11 11:05:17.61	2012-06-11 09:11:45.55		
	F35_GOOSEOut_2	goose	135	5844	1	2012-06-11 11:05:16.13	1970-01-01 01:00:00.00	01:A0:F4:04:30:33	00:A0:F4:04:30:33
	N60_GOOSEOut_1	goose	166	120	105	2012-06-11 11:05:13.17	2012-06-11 09:07:55.22	01:A0:F4:04:12:CC	00:A0:F4:04:12:CC
	61850easy	goose	127	109	1	2012-06-11 11:04:26.30	2012-06-11 10:20:19.02	01:0C:CD:01:22:01	00:A0:F4:02:01:92

View GOOSE packet information

ID: 63617 Time: 2012-06-11 11:05:13.170048 Type: goose Source: 00:a0:f4:04:12:cc Destination: 01:a0:f4:04:12:cc

Title	Value	Ind.	Bin.	Dec.	Hex.	Ch
Ethernet		14	00000000	000	00	
Destination MAC	01:a0:f4:04:12:cc	15	00000001	001	01	
Source MAC	00:a0:f4:04:12:cc	16	00000000	000	00	
Type	GOOSE	17	10011000	152	98	
GOOSE		18	00000000	000	00	
ETYP APPID	1				00	
Length	152				00	

Drill down into the packet for further GOOSE packet data

MMS Discovery

- Live object model monitoring
- Browse any IEC 61850 MMS server
- Device Discovery:
 - View latest real time data values from polled devices
 - Display tabs/subsets of the object models (measurements, protection, etc.)
- Points Panel – display of real time data values in a user definable view
- Add descriptions to data attributes
- Edit accessible data attributes within an object model

MMS DISCOVERY (61850easy VIEW)

Workspace

Start Page Device Setup 192.168.3.22@N60 Network Relay 5.61

View All Data Measurements Reports Datasets GOOSE Switchgear Protection Points Panel '61850easy' View

Description

C Supervisory Control

G Generic Function References

GGIO Generic process I/O

GGIO1 N60_RelayDemo/GGIO1

GGIO2 N60_RelayDemo/GGIO2

GGIO3 N60_RelayDemo/GGIO3

GGIO4 N60_RelayDemo/GGIO4

L System Logical Nodes

LLN0 Logical node zero

LLN0 N60_RelayDemo/LLN0

LPHD Physical device information

M Metering and Measurement

P Protection Functions

R Protection Related Functions

X Switchgear

N60_RelayDemo/LLN0\$ST\$Beh\$stVal

Common Information

Status Information

Full name	Type	Value
N60_RelayDemo/LLN0\$ST\$Mod\$stVal	Integer	1
N60_RelayDemo/LLN0\$ST\$Mod\$q	Bits	00000000000000
N60_RelayDemo/LLN0\$ST\$Mod\$t	Timestamp	2012-06-11 15:14:24.041437
N60_RelayDemo/LLN0\$ST\$Beh\$stVal	Integer	1
N60_RelayDemo/LLN0\$ST\$Beh\$q	Bits	00000000000000
N60_RelayDemo/LLN0\$ST\$Beh\$t	Timestamp	2012-06-11 15:14:24.041437
N60_RelayDemo/LLN0\$ST\$Health\$stVal	Integer	1
N60_RelayDemo/LLN0\$ST\$Health\$q	Bits	00000000000000
N60_RelayDemo/LLN0\$ST\$Health\$t	Timestamp	2012-06-11 15:14:24.041437

Use '61850easy' View to quickly browse the IEC 61850 data of a device added to the database

Embedded Tools

- SMART grouping and dynamic help for all IEC 61850 models to assist users
- Viewer & Diff function for SCL files (IEC 61850 part 6-1) based upon XML technology
- COMTRADE viewer for displaying of stored binary or ASCII files signals and waveforms

DYNAMIC HELP FUNCTION – WITH THE CLICK OF A BUTTON ACCESS HELP ON THE ELEMENTS OF IEC 61850

File View Help

Tools

Setup

Maintenance

Device Setup

GOOSE Setup

Clone Setup

Device Manager

Server

Client

GOOSE

Analyzer

SCL

Comtrade

Workspace

Start Page Device: N60 Network Relay 5.61

View All Data Measurements Reports Datasets GOOSE Switchgear Protection '61850easy' View

-- Show All Data -- -- Show All Data -- -- Show All Data -- -- Show All Data --

N60 Network Relay 5.61 @ 192.168.3.22

Logical device: N60_RelayDemo CSWI

Logical node: CSWI13

Dynamic Help

CSWI

The switch control logical node is used to control all switchgear condition above the process level. This logical node represents the status and control of the switching device.

The CSWI has a data object Pos with the attribute ct/Val (control value) that can be addressed by a substation computer. The substation computer sends a control message to the device with the Logical Node CSWI – it addresses the attribute CSWI.ct/Val and sets it to Open or Close. The operation to close a circuit breaker will not be allowed if the configured conditions for blocking the open or close are fulfilled.

Previous Home Up Next

Connected! GOOSE Capture is running Simulator is not running FlexSpy Wed Apr 11 10:37:17 GMT+0100 2012 61850easy © 2012 Grid Smart Software. All rights reserved.

GOOSE PUBLISHER AND MMS CLIENT PACKAGE ADD-ON

Additional GOOSE Publisher Functionality

- Simulate a packet or packets from a live device including their associated retransmission
- Manually simulate the GOOSE publications of an IED or multiple IEDs (via SCL & MMS Client)
- GOOSE Sequencer – produce user definable and automated simulation test sequences and traffic utilizing time and state triggering options (from live GOOSE traffic) for individual or multiple devices
- GOOSE In Simulation – monitoring application detailing all 61850easy simulated GOOSE packets
- Create simulated live traffic for lab testing, FAT and SAT applications
- Edit simulated device(s) GOOSE Control Block attributes
- Clone 61850easy Server devices

SIMULATE GOOSE – MANUALLY SIMULATE PACKETS FROM A DEVICE

The screenshot shows the 'Simulate GOOSE' workspace. At the top, there are dropdowns for 'Devices' (set to 'easyF35') and 'GOOSE' (set to 'F35_Tx_GOOSE1 (*)'). Below these are fields for 'Order code' and a 'Stop simulation' button. The main area is a table with the following columns: Data Name, Data Source, Data Type, and Value.

Data Name	Data Source	Data Type	Value
easyF35/Id/GGIO1\$ST\$Ind1\$stVal	PHASE UV1 OP	BOOLEAN	0
easyF35/Id/GGIO1\$ST\$Ind2\$stVal	X305 OPENED Off(P1a)	BOOLEAN	<input checked="" type="checkbox"/>
easyF35/Id/GGIO1\$ST\$Ind3\$stVal	Cont Ip 17 Off(W1a)	BOOLEAN	0
easyF35/Id/GGIO1\$ST\$Ind4\$stVal	X305 CLOSED On(P1c)	BOOLEAN	1

A callout box labeled 'Manually change values' points to the 'Value' column, indicating that users can manually edit these values.

GOOSE SEQUENCER – CREATE A USER DEFINABLE SIMULATED TEST SEQUENCE

The screenshot shows the 'GOOSE Sequencer' workspace. At the top, there are tabs for 'GOOSE Sequencer' and 'Sequencer Player'. Below these is a 'Devices' section with a 'Reload' button and a table of devices. A callout 'Select a device' points to the 'Name' column of the devices table.

Name	IP	Manufacturer	Model	Firmware	Source
N60 Network Relay 5.61	192.168.3.22	GE MULTILIN	N60 Network Relay 5.61	5.61	MMS
F35 Feeder Relay	192.168.3.23	GE MULTILIN	F35 Feeder Relay	5.90	MMS

Below the devices table is a 'Device ID' dropdown set to 'N60_GOOSEOut_1'. A callout 'Choose a GOOSE Control Block from your selected device' points to this dropdown.

The main area shows 'DataSet elements' and 'Trigger DA Name' tables. A callout 'Add DataSet elements to the stage simulation or logical stage trigger' points to the 'DataSet elements' table.

DataSet elements:	Source	Sim	Trig	Simulated DA Name	Value
N60_RelayDemo/GGIO1\$ST\$Ind1\$stVal	CTRL P	+	+	N60_RelayDemo/MMXU1\$MX\$Hz\$mag\$f	50
N60_RelayDemo/GGIO1\$ST\$Ind2\$stVal	CTRL P	+	+		
N60_RelayDemo/GGIO1\$ST\$Ind3\$stVal	CTRL P	+	+		
N60_RelayDemo/GGIO1\$ST\$Ind4\$stVal	Cont	+	+		
N60_RelayDemo/GGIO1\$ST\$Ind5\$stVal	Cont Ip	+	+		
N60_RelayDemo/GGIO1\$ST\$Ind1\$q	CTRL P	+	+		
N60_RelayDemo/MMXU1\$MX\$Hz\$mag\$f		+	+		
N60_RelayDemo/MMXU1\$MX\$PhV\$phsA\$cVal\$mag\$f		+	+		

The 'Trigger DA Name' table has columns for 'Trigger DA Name', 'Operator', and 'Value'.

Trigger DA Name	Operator	Value
F35_RelayDemo/GGIO1\$ST\$Ind1\$stVal	=	0
F35_RelayDemo/GGIO1\$ST\$Ind2\$stVal	=	1

At the bottom, there are buttons for 'Open Sequence Player', 'Save sequence', and 'Load sequence', along with navigation controls and a 'delete' button.

- Live access to Buffered & Unbuffered Reports
- Edit the individual attributes of the report control block
- View the active DataSet from a selected report
- Enable individual or multiple reports simultaneously with unique colour tagging

BUFFERED REPORTS – COLOUR TAGGING OF LIVE BUFFERED REPORTS

Select your designated time range search and criteria

Enable reports with the click of a mouse

View your selected live reports and click the details tab for further information

Details	IP	SeqNum	DataSet	Easy Time	Report Time	InclusionBitstring	dataCount
Visible	192.168.3.22	0	F35_RelayDemo/GGIO1\$ST	2012-03-22 10:45:37.805017	2012-03-22 10:45		
Visible	192.168.3.23	0	N60_RelayDemo/MMXU1\$MX	2012-03-22 10:44:51.209816	2012-03-22 10:44		
Visible	192.168.3.22	1	N60_RelayDemo/MMXU2\$MX	2012-03-22 10:46:49.566695	2012-03-22 10:46		
Visible	192.168.3.23	1	F35_RelayDemo/GGIO1\$ST	2012-03-22 10:45:42.838105	2012-03-22 10:45		
Visible	192.168.3.22	1	N60_RelayDemo/MMXU1\$MX	2012-03-22 10:44:56.257495	2012-03-22 10:44:56.575000	11111111111111111111111111111111	27
Visible	192.168.3.23	2	F35_RelayDemo/GGIO1\$ST	2012-03-22 10:45:47.870724	2012-03-22 10:45:48.067000	111111111111	11
Visible	192.168.3.22	2	N60_RelayDemo/MMXU2\$MX	2012-03-22 10:46:54.599380	2012-03-22 10:46:54.919000	11111111111111111111111111111111	27
Visible	192.168.3.22	2	N60_RelayDemo/MMXU1\$MX	2012-03-22 10:45:01.290152	2012-03-22 10:45:01.607000	11111111111111111111111111111111	27

MMS Analyzer

- Provides access to archived reports with enhanced search facilities and smart filters:
 - Access all archived MMS Buffered & Unbuffered reports
 - Export filtered data to XML or CSV file format

UNBUFFERED REPORTS SEARCH – SEARCH FOR PACKETS WITHIN USER DEFINED TIME RANGES

Select your designated time range search and filters for reports in the 61850easy database

View report data

Drill down into specific report details with the ability to export data as necessary

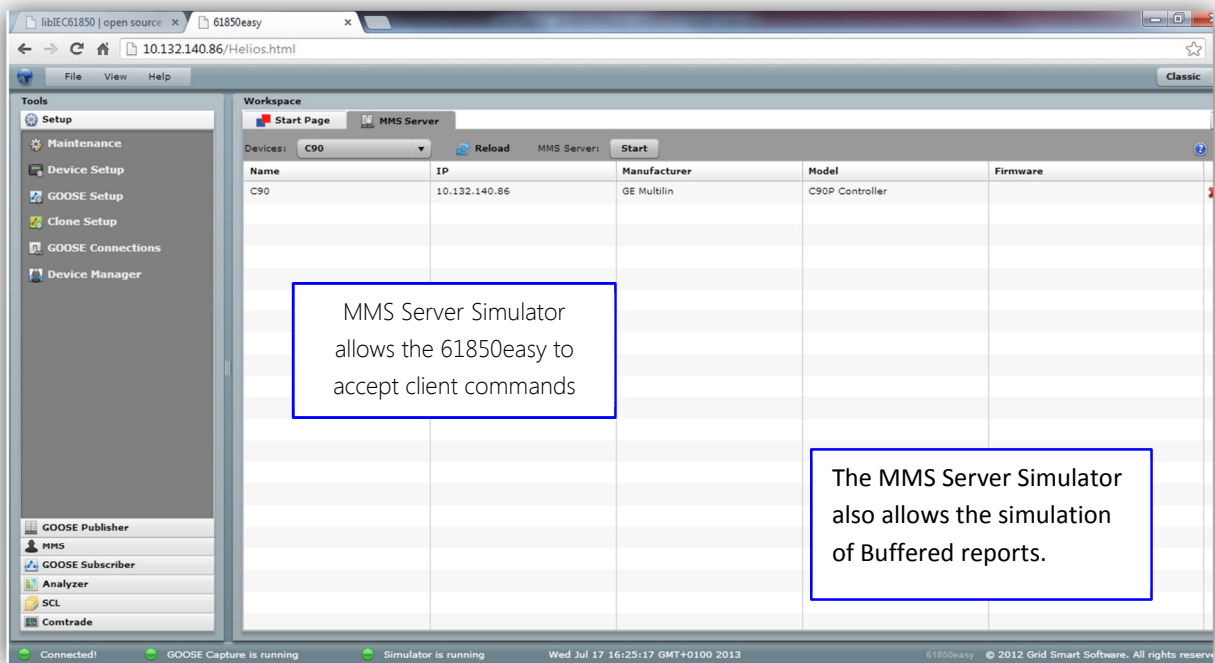
Details	IP	Report ID	SeqNum	DataSet	Easy Time	Report Time	dataCount
Visible	192.168.3.22	N60_RelayDemo/MMXU2\$RP\$urcbMX	0	N60_RelayDemo/MMXU2\$MX	2012-03-29 15:19:05.00	2012-03-29 15:19:05.00	27
Visible	192.168.3.22	N60_RelayDemo/MMXU2\$RP\$urcbMX	1	N60_RelayDemo/MMXU2\$MX	2012-03-29 15:19:10.00	2012-03-29 15:19:06.60	27

Export type	Value
result	
N60_RelayDemo/MMXU2\$RP\$urcbMX	
SeqNum	1
TimeOfEntry	2012-03-29 15:19:06.607000
DataSet	192.168.3.22:N60_RelayDemo/MMXU2\$MX

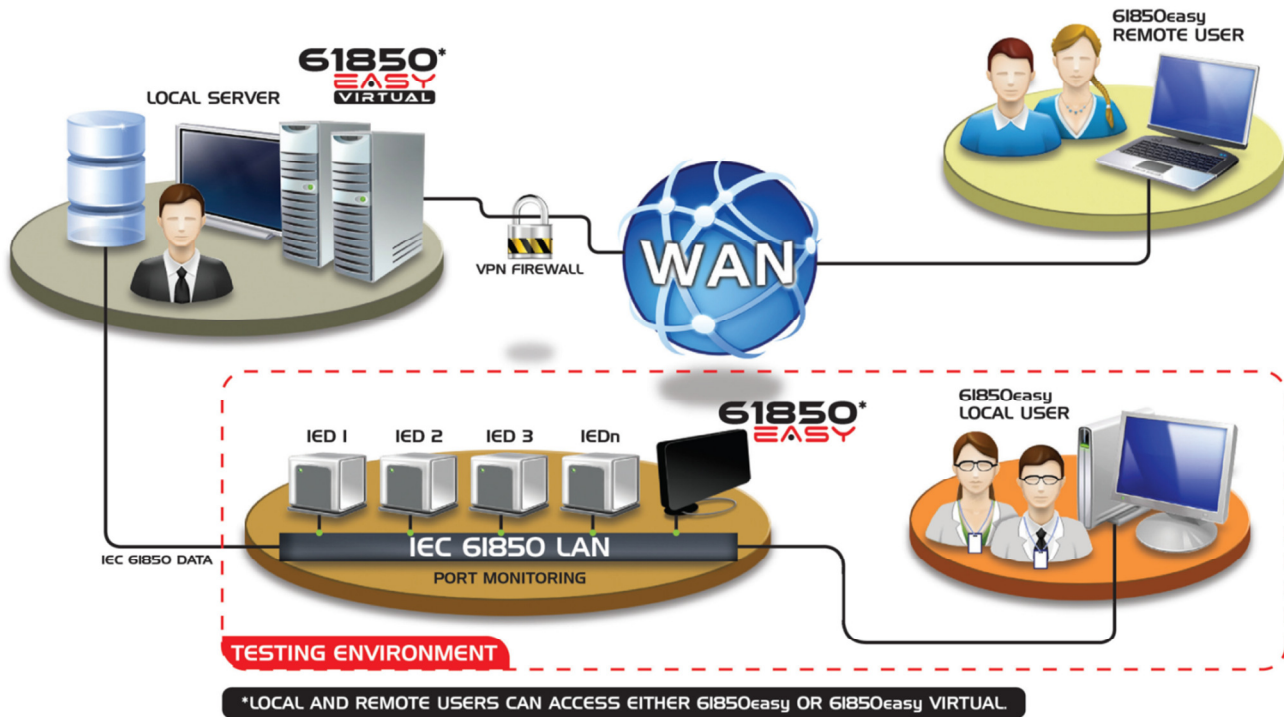
MMS SERVER PACKAGE ADD-ON

MMS server

- Simulate a single IED MMS Object Domain from an ICD file
- Able to accept read/write commands from an MMS Client
- Able to simulate buffered reports.



EXAMPLE OF IEC 61850 LAN CONNECTION WITH 61850easy



[61850easy TEST SET](#)

The 61850easy Test Set is Grid Smart's complete IEC 61850 test solution that combines the entire range of functionality detailed in our 61850easy Core, GOOSE Publisher and MMS Services Packages. Available in both embedded and virtual formats, the 61850easy Test Set combines all of the key advantages of the core, add-on packages and associated functionality in one user workspace.

[61850easy LICENCE INFORMATION](#)

All Grid Smart's 61850easy packages include a single client licence, additional client licences may be purchased for 61850easy but not for 61850easy VIRTUAL packages.

MULTIPLE CLIENT LICENCES

When a client PC accesses the 61850easy server for the first time it must be registered. Once a client PC has been registered it consumes a licence, when all the available licences are consumed no additional client PC's are able to access the 61850easy server. In order to allow another PC to connect to 61850easy the user must unregister a previously registered PC from the 61850easy server.

SERVICE SUPPORT & DEVELOPMENT

Each 61850easy package has an accompanying annual support package which provides users with access to technical support and software updates when issued from our specialist team. Renewable annually, the support package ensures all updates are provided accordingly and information in relation to the future development of the equipment and software will be made available by Grid Smart Software, including any new functionality releases that are relevant to the respective 61850easy packages.

SERVICE SUPPORT

Account Management – Each client is assigned an Account Manager from the outset. The Account Manager is the primary contact for client requirements (via the Service Desk), excluding immediate service support requirements. The Account Manager will deliver all release update information; statutory change update information; R&D strategy with precedence. The Account Manager will also work with you to ensure you have full visibility of all 61850easy user groups and online forums.

Service Support Model – The Grid Smart service model allows users to liaise directly with the System Development Team. We don't believe that 1st /2nd/3rd Tier support models deliver value to the customer. In line with our agreed Service Level Agreement (SLA), the service support team will provide issue resolution and fault diagnosis; problem resolution; 'how to' support; system and software updates; statutory changes to software; release documentation and training notes.

DEVELOPMENT

As a part of the annual support package, at no additional cost, users will have access to all system updates for the software. New functionality that is released through Grid Smart's Research & Development (R&D) schedule may be included with the annual support package (dependent upon the functionality provided).

As a core supplier within the IEC 61850 global market, Grid Smart operates an aggressive R&D strategy that sees new functionality and modules released across the year, alongside full documentation, technical notes and user guides.





AT THE HEART OF IEC 61850 EXCELLENCE

For more information contact

Grid Smart Software Limited

1 Merchant Court | Monkton Business Park South

Hebburn | Tyne & Wear | NE31 2EX | England

EMAIL team@61850easy.com | WEB www.61850easy.com

TELEPHONE +44 (0)191 495 5240 | SUPPORT +44 (0)191 495 5241

Company No. 07387754