



PROTECSA



IEC- 61850 (Edition 2.0) Advanced System Integration Training Mexico, 22 – 23 February 2012

Utilities and Power Industry has recognized the efforts of Technical committee IEC technical committee 57 (Power system control and associated communications) in developing IEC61850. Acceptance of this standard globally is a bold step towards renewing the existing assets and empowering new developments. IEC61850 transformed the way protection, control and communication will be engineered in future.

PROTECSA Engineering is a partner of Kalki Technologies (Kalkitech) leader in standard based automation and together providing solutions in IEC 61850 Implementation Consulting, IEC 61850 system Integration, Commissioning, Testing Services, Enterprise Software, Product Engineering, Training Services and more. With hands on experience and proven capabilities we are supporting utilities in Mexican region.

Protecsa Engineering is a leading provider of systems integration and automation control of the energy sector. Protecsa Engineering has always favored continuous innovation through research and development philosophy over the years, and has become a preferred partner. Protecsa in a diversified portfolio of multinational clients, who recognize the high quality of engineering, automation, communication products, solutions and services offered.

As a part of continual professional development we are conducting a two day comprehensive seminar plus training workshop on IEC61850 standards for substation automation. Key features of this program are:

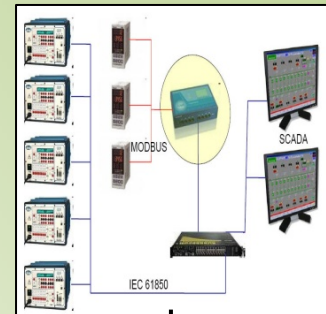
- This training course will cover the theoretical as well as practical aspects behind IEC61850 by reviewing the salient standards of IEC61850 and supplement it with demonstrations of 61850 communications between clients and servers, IED-to-IED communications using GOOSE messages, the philosophy of inter-operable engineering and configuration using SCL Manager.
- This training workshop is designed to provide valuable knowledge on 61850 standards to power utilities and personnel involved with the implementation and commissioning of substation automation solutions using IEC-61850.
- The training is being delivered and developed by the experts involved in development and successful practical implementation of SCL Manager and interoperable products.



What does the training provide?

This training course provides advanced skills in substation automation including overview of IEC61850 for beginners. Salient points of the course are:

- Overview of IEC61850
- Introduction to Substation Configuration language (SCL)
- SCL Manager application
- Core 61850 specifications 7-2 ACSI/ 7-3 CDC and 7-4 LN Review
- MMS Protocol Overview
- Client/Server demo for practical realisation with SISCO/Kalki implementation server
- 61850 specifications 8-1, 9-1, 9-2 SCSM Review



Who should attend?

This training course is designed to assist the stakeholders involved in development and implementation of IEC61850 for substation automation. This training is intended but not limited to engineers and technical staff involved in installing, configuring and maintaining or operating substation automation and control systems, using IEC61850.

This training course is designed to introduce users with the practical insight of IEC61850 and also includes examples from successful implementations done by Kalkitech internationally.

- Utility Engineers
- System Integrators
- OEMs
- Maintenance Staff
- Consultant
- Network Planners
- System Designers
- Project Managers

Suggested Reading:

- www.en.wikipedia.org/wiki/IEC_61850
- www.kalkitech.com

Kalkitech Products:

DLMS Source Code | Protocol Gateways | PDC | IEC 61850 SCL Tool | Plant Efficiency | ABT Software | AMR Software | Enterprise Integration | DA/DMS

Kalkitech Services:

Services: Automation | Enterprise Software | Communication Protocols | Consulting | Product Engineering | Strategic Outsourcing

We are members of:



Training/ Course Schedule

Advanced IEC-61850, edition 2.0 Protocol, Utilities and Tools

	Day 1	Day 2
9:00 - 10:30	Overview of IEC61850 - Introduction to the specs - History of IEC61850 - Comparison to other Standard Protocols - 61850 - Basics	61850 Specification Review - 7-2 ACSI - Data Sets - Reporting and Logging - Control Class 61850 Communications Demo Demo of Datasets, Reporting & Logging and Control Commands
10:30 - 10:45	Break	
10:45 - 12:30	Introduction to IEC61850 - Substation Configuration Language (SCL) - ICD / SSD / SCD / CID Files. - Ed 2. Files - IID / SED Files SCL Manager Demonstration - Create S/S Specification SSD - Create IED ICD files - Import ICDs into S/S Spec - Configure S/S > SCD	61850 Specification Review - 7-2 ACSI - Substitution - Setting Groups - GOOSE and GSSE. - Sampled Value Transmission - File Transfer 61850 Communications Demo Demo of Substitution, Settings, GOOSE messaging
12:30 - 13:30	Lunch	
13:30 - 15:00	61850 Specification Review - 7-2 ACSI - Server Class Model - Logical Device (LD) Class Model - Logical Node (LN) Class Model - Data Class Model 61850 Communications Demo Demo Setup - Create ICD, Simulate IED with Kalkitech IED Simulator, Basic Communication demo with SISCO AX-S4-61850 Client	61850 Specification Review - 8-1,9-1,9-2 SCSM Communication Stack Station bus and Process bus Mapping to MMS Mapping of Goose and GSE
15:00 - 15:15	Break	
15:15 - 17:00	61850 Specification Review - 7-3 CDC - Common Data Attribute Types - Common Data Class Specifications. 61850 Specification Review - 7-4 LN - Compatible Logical Node Classes	Q&A - Open Questions and Discussions

Certificate of Completion will be provided to each participant at the end of program

Trainer Profile



Director Product Management Communication Products

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Vinoo S Warriar serves as the Director of Product Management for Kalkitech's Communication Product range. Previously Vinoo has occupied several roles in Kalkitech including delivery of protocol implementation services involving several implementations of IEC61850, DLMS/COSEM, DNP3, IEC-870-5, ICCP (TASE.2) and other protocols on IEDs, RTUs, PLCs, SCADA and specific Data Acquisition systems. Vinoo is a member of the DLMS/COSEM Protocol Maintenance Working Group and serves as the Secretary to WG1-Interoperability Working Group under the Bureau of Indian Standards LITD10 Sectional Committee.

Contact us:

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