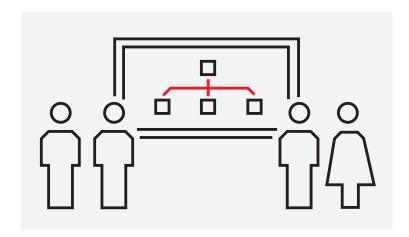


COURSE DESCRIPTION

S430

S+ Operations – SCADA application



The goal of this course is to learn how to design and configure S+ Operations HMI (Human Machine Interface) in SCADA applications.

Learning objectives

Upon completion of this course, students will be able to:

- Identify S+ Operations system architecture in SCADA application
- · Apply basic system sizing criteria
- Install S+ Operations
- Configure security with user accounts
- · Check and configure server redundancy
- · Configure the operator workplace
- Configure time synchronization
- · Configure and edit HMI database
- Configure process graphic displays and define navigation links
- · Create graphic elements
- Manage and configure alarm and events
- Set up the historical data collection and configure trend displays
- Setup Web Client
- Configure third party communication with AC500/Universal Connect
- Understand S+ Operations support for PLC based store and forward functionality
- · Configure Modbus TCP communication
- Configure IEC-60870-5-104 communication
- Configure OPC server and client
- Diagnose S+ Operations stations
- Configure historical reports and scheduler
- Execute project backup and restore
- · Execute software and project upgrades

Participant profile

This training is targeted to system and application engineers, commissioning and maintenance personnel, service engineers and system integrators.

Prerequisites

Students should have a general understanding of process automation and basic knowledge of SCADA systems. Experience in dealing with and handling of current Microsoft operating system is an advantage.

Topics

- S+ Operations system architecture
- · Software installation
- Composer Operations
- User security
- · Server redundancy
- Operator workplace
- Time synchronization
- · Tag database
- Control faceplates, alarm and events, trend displays
- · Process graphics
- S+ Operations Historian
- Web client
- · SCADA communication protocols
- System diagnostics
- Backup and restore
- Software upgrade

Course type and methods

This is an instructor led course with interactive classroom discussions and associated lab exercises. Approximately 50% of the course is hands-on lab activities.

Duration

9 1/2 days



Agenda

Day 1	Day 2	Day 3	Day 4	Day 5
Course overview	User security	Operator workplace	OPC server and client	Modbus TCP
System architecture	Composer Operations	Time sync	AC500/Universal Connect	IEC-60870-5-104
System sizing	Server redundancy	HMI database	PLC store and forward	Hands-on lab: exercises
Installation	Hands-on lab: exercises	Hands-on lab: exercises	Hands-on lab: exercises	
Hands-on lab: exercises				

Day 6	Day 7	Day 8	Day 9	Day 10
Graphic displays	Historical data collection	Historical reports and scheduler	Diagnostics	Software and project upgrades
Graphic elements	Trend displays	Web client	Project backup and restore	Hands-on lab: exercises
Alarms and Events	Hands-on lab: exercises	Hands-on lab: exercises	Hands-on lab: exercises	Questions and answers