SIEMENS

Switching & Routing in Industrial Networks with RUGGEDCOM (RC-SWIROR)

Type

Instructor-led Learning

Duration and Continuing Education Units (CEU)

5 Days
0 CEUs

Target Group

- Engineer
- Commissioning
- Maintenance
- Operator
- Programmer
- Reliability
- Sales
- Other

Short Description

Ethernet has found its way into the industrial environment. A high degree of reliability and throughput rates are demanded from industrial networks. At the same time a reliable integration into a corporate network is highly required. In this course, participants will gain the theoretical and practical knowledge required for real world implementation of Industrial Networks and the methods applied to operate and maintain such networks. You will also gain theoretical and practical knowledge of what IP communications, routing protocols, redundancy, LAN/WAN concepts that helps facilitate communications between multiple network locations. In addition, participants will apply these concepts on RUGGEDCOM devices. The course includes ample time for practical exercises, diagnostics, and troubleshooting.

Objectives

- At the end of the course, participants will be familiar with the special requirements of industrial network solutions and will have the knowledge to plan, implement, and provide support for plain networks in an industrial or industry-related environment.

Content

- Layer 2 Technology Overview
- Switching in Industrial Ethernet Networks
- Commissioning with RUGGEDCOM Operating System (ROS)
- Port Configuration
- Redundancy in Switched Networks (Rapid Spanning Tree Protocol)
- Network segmentation with Virtual Local Area Networks (VLAN)
- Increasing bandwidth availability (Link Aggregation)
- Integrating Serial Protocols
- Monitoring (ROS)
- Diagnostics and Troubleshooting (ROS)
- Layer 3 Technology Overview

- Commissioning with ROX Operating System
- LAN and IP interfaces
- WAN interfaces
- Internet Protocol Services
- Router redundancy (VRRP)
- Static Routing
- Dynamic Routing (OSPF)
- Practical exercises using the RUGGEDCOM products

Recommended Prerequisites

[IC-ETHFU: IC-ETHFU](#)

Language

English