RC-SEC1

Security in Industrial Networks with RUGGEDCOM

Siemens Certified Professional for Industrial Networks (CPIN) certification training

Description

It is difficult to imagine day-to-day industrial operations without Ethernet connections. From large-scale environment to the smallest Industrial Ethernet communication network, nearly everything has come to depend on the overall systems reliability and security. The opportunities on the one hand are countered by risks on the other. Access by outsiders or manipulations in the network always has catastrophic consequences on application or on in-house expertise. Therefore, functioning security systems are an absolute must.

In this training course "Security in Industrial Networks" of the Industrial Networks Education – Certification Program, you will learn the potential dangers in industrial networks and how-to safe guard against them.

This training course includes ample time for practical exercises, diagnostics, and troubleshooting.

At the end of the course students are equipped with the knowledge to plan, configure, operate and provide support for networks in their specific market.

Objectives

In this course you will learn course you will have knowledge in protection concepts and be able to apply them in specific, practical exercises and be able to correctly assess threats and initiate countermeasures.

Key Topics:

1. Protecting Industrial Networks
2. Hardening the Switch
3. Control Networks Protection
4. Concealing Internal IP network identity
5. Building Virtual Private Networks
6. Appendix – Commissioning (ROXII Platform)

Prerequisites

Requirements for attendance:

- Basic knowledge of the topic "Ethernet"
- Familiarisation with network topologies, Media Access Control (MAC), Internet protocol, data transport and associated technical vocabulary
- Familiar with the principles of switching operations, hubs and the OSI reference model
- Recommended: Participants are encouraged to attend the Industrial Fundamentals training course or pass a written examination however this is **NOT** mandatory.

Course contents

This course covers the following topics:

- Security in Industrial Ethernet Networks
- Security Defence-in depth approach
- Security measure and guidelines (best practises, industry driven)
- Protecting Control Networks (firewall, address translation (NAT))
- Site to Site and Remote access via VPN (IPSec)
- Hardening the RUGGEDCOM ROX Security
- Practical exercises using the RUGGEDCOM ROX product line

Course Details

Duration: 3 days

Location of course: Siemens Training Offices

(Australia/New Zealand)

Dates: Refer to training course schedule

Size: Min 4 participants

Contact:

To enquire or book email:

Ruggedcom.au@siemens.com

For any further information call:

+61 (0) 437 911 594

Assessment

After the training course you have the opportunity to become certified as "Siemens Certified Professional for Industrial Networks – Security"

A voluntary examination takes place at the end of the training however this is **NOT** compulsory

Participants are required to complete an examination which consists of two sections that will take place at the end of training. Alternativly the examination can be taken at a later time.

Is this course right for you?

This course is for users who are involved with developing or sustaining networks in rugged environments - such as Electric Power, Transportation, Rail and Defence markets where RUGGEDCOM equipment is required. This includes, but is not limited to the following:

- Application Engineers
- Automation Engineers
- Communication Engineers
- Operations or IT Network Engineers
- Project Engineers
- Substation Engineers
- System Engineers