SIEMENS

SITRAIN: Security in Industrial Networks with RUGGEDCOM (Face-to-face Training) (RC-SECINP)

Short Description

This training was conducted until March 03, 2026 under the course number IK-SECI-R.. 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 dependency on the overall systems reliability and security. The opportunities on the one hand are countered by risks on the other hand. 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.

During the course you will become familiar with the knowledge necessary to apply concepts mandated by common security standards. The course does not just cover theoretical security concepts, it also provides the opportunity to implement these concepts through practical hands-on exercises.

Objectives

At the end of this course, participants will understand the requirements and fundamentals needed to plan, implement, and provide support for industrial security measures.

Target Group

- Decision makers
- Planners
- Sales personnel
- Configuring engineers
- Commissioning engineers
- Engineering personnel
- Project engineers
- Maintenance personnel
- Service personnel
- Industry: COOs
- IT: CIOs, network planners and administrators

Content

- Understanding what threats lurk Industrial Ethernet networks
- Defense-in-depth approach
- Security measures and guidelines (best practices, industry driven)
- Hardening the RUGGEDCOM product line
- Protecting Control Networks (firewall, address translation (NAT))
- Site to Site and Remote access via VPN (IPsec)
- Comprehensive exercises using the SIMATIC NET product portfolio

Prerequisites

Knowledge according to course "Ethernet Fundamentals in Industrial Networks":

Participants shall have basic knowledge of Ethernet and should be familiar with network topologies, Media Access Control (MAC), Internet Protocol, data transport and associated technical vocabulary. It is also helpful if you are familiar with the principles of operation of switches, hubs and the OSI reference model.

Participants are encouraged to attend the "Switching and Routing in Industrial Networks with RUGGEDCOM" training course.

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Note

Included in the course price: Free access to the digital learning platform SITRAIN access – starting one week before the start of the course until two weeks after the end of the course.
With the Learning Membership, you can deepen or repeat the content of this Learning Event as well as continue your education on other interesting topics.

Certification (Siemens CPIN-LEVEL)

After the training course, you have the opportunity to become certified as "Siemens Certified Professional for Industrial Networks - Security". A voluntary certification examination takes place at the end of this training. As an option, the examination may be taken at a later time.

Please note that before the examination you have to identify yourself by showing a valid photo identification.

To prepare for the training, please work through the WBT Data communication with Industrial Ethernet.

Type

Face-to-face training

Duration

3 days

Language

en

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