Network Monitoring and Configuration SINEC NMS with RUGGEDCOM

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Description

The complexity and number of devices in Ethernet-based industrial networks are constantly increasing due to growing requirements. Failure of devices in such networks may result in downtime and the disruption of critical services. To minimize downtime and its associated costs, transparency and a continuous monitoring of the network is crucial. Additionally, manual setup and management of device and firewall-/NAT-configurations as well as firmware updates can be inefficient and error prone. SINEC NMS is a central solution for monitoring a wide range of different devices in a network as well as for configuration and management of the RUGGEDCOM network portfolio.

Objective

In this course, participants will learn how to use the network monitoring and management system SINEC NMS to monitor, document, and configure their network from a central location as well as to plan, implement, and maintain their network monitoring solution. Through in-depth practical exercises you will put the theoretical knowledge into practice.

At the end of the course, you will be familiar with the requirements and solutions for monitoring and managing industrial networks with SINEC NMS, and you will be able to monitor, document, and configure industrial networks with SINEC NMS.

Target Group

Protection Engineers, Control Engineers, Railway Communications System Engineers, Commissioning Engineers, Application Engineers, Service and Maintenance Personnel, OT and IT Network Engineers, Technical Sales Personnel

Requirement

Knowledge in accordance with the course "Ethernet Fundamentals in Industrial Networks": you should be familiar with topologies, transmission methods, addressing and transport of data, and understand the associated technical vocabulary. It is also helpful to be familiar with the functionality of routers and switches as well as the OSI reference model.

Duration

3.5 days

Content

- Fundamentals of network monitoring
- Documentation and inventory of networks to create transparency
- Detection and diagnostics of network events
- Customized and clear depiction of the monitored network
- Evaluation and optimization of the network performance
- Monitoring of third-party devices (manufacturer-independent network monitoring)
- Central user management with UMC (User Management Component)
- Integration of the network monitoring data with external systems
- Implementation of policy-based network configurations with SINEC NMS
- Central firewall- and NAT-management
- Network monitoring with multiple SINEC NMS Operations
- Practical exercises

Certification (Siemens CPIN-LEVEL)

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