SIEMENS

Diagnostics and Optimization of Industrial Networks with SCALANCE (IC-DIOPINE)

Краткое описание

A reliable, robust network is the backbone of any modern industrial enterprise. Since the network requirements can change over the life cycle of a plant, or other application, the diagnostics and optimization of the network are extremely important tasks. Even during planning stages, various aspects regarding the functionality and diagnostic capability have to be taken into account. For instance, clear network documentation, knowledge of enhanced functionalities of modern switches and routers, as well as up-to-date tools for the operation of networks are imperative for diagnostics and optimization.

Using practical examples, participants of this course will learn how to diagnose typical error causes in industrial networks, and determine how to prevent them or minimize their impact with the aid of enhanced device functions. You will be trained to secure administrative access to the components, and to restrict access to the network itself.

You can deepen your theoretical knowledge with numerous practical exercises on products from the SCALANCE product line.

Цели

After attending this course, participants are able to diagnose and optimize industrial networks. Participants will also be familiar with the available tools and functions which can be used to ensure the required performance, availability and security of the network.

Целевая группа

- technical Sales Personnel
- Plant Engineers
- Control Engineers
- System Engineers
- Commission Engineers
- Application Engineers
- Service and Maintenance Personnel
- Operations or IT Network Engineers
- Facility Managers

Содержание

- Introduction to basic tools such as terminal access and network analysis tools, as well as applications for time synchronization and logging of event messages
- Basics of a professional network layout
- Network analysis for troubleshooting
- Detection and prevention of physical errors
- Detection and prevention of Ethernet errors
- Identification and fulfillment of security requirements
- Detection and prevention of overload situations
- Optimization of convergence times
- Comprehensive exercises
- Practical exercises

Требования к участнику

Knowledge in accordance with the course "Switching and Routing in Industrial Networks":

Participants must be very familiar with topologies, transmission methods, addressing and transport of data in industrial networks, and ideally possess practical experience in the field of industrial networks.

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

Примечания

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 CEIN-LEVEL):

Following the training, there is an option of taking a certification test. This test is part of the certification to become a "Siemens Certified Expert for Industrial Networks", which consists of several individual tests.

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

Тип

Очный тренинг

Продолжительность

3 Д н .

Я з ы к

en

copyright by Siemens AG 2026