

The Siemens logo is displayed in a white rectangular box. The background of the entire page features a tablet displaying a network diagram, a document with a signature and date, and a circular seal that reads 'SIEMENS Certified INDUSTRIAL NETWORKS'.

Wireless LAN in Industrial Networks

Industrial Networks Education

Description

In industrial environments, WLAN is exposed to more extreme conditions, such as temperature fluctuations, humidity, dust, etc. In addition, a high-degree of reliability and performance is expected from these systems. At the same time, these industrial WLAN networks (IWLAN for short) provide a great deal of flexibility for companies in the implementation of complex applications indoors and outdoors. Thus, with Safety Integrated, applications can also be wirelessly implemented and seamlessly connected to Industrial Ethernet with PROFINET components.

Familiarize yourself with the required fundamentals of such networks in the qualification module „Wireless LAN in Industrial Networks“ of the Industrial Networks Education - Certification Program.

Objective

The course teaches the configuration, planning, and operation of IWLAN, also in interaction with real-time-capable systems. To ensure that the theoretical knowledge can later be implemented, we value in-depth practical exercises during the training. At the end of the course, you will know the requirements for wireless solutions in industrial networks. You will learn the fundamentals and knowledge required to plan, implement, and support for plain mobile networks.

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

Contents

- Comparison and coexistence of different wireless technologies
- Theoretical fundamentals of wireless technology
- Introduction to the different WLAN standards
- Security and high data rates in WLAN
- Planning and configuration of different radio links
- Planning and configuration of RCOAX radio networks with iPCF
- Planning and configuration of free radio networks with iPCF-MC
- Comprehensive exercises using the SCALANCE W product line

Target Group

Decision makers, sales personnel

Industry: COOs, planners, commissioning engineers, project engineers, maintenance and service personnel

IT: CIOs, network planners and administrators

Requirements

Knowledge according to course "Ethernet Fundamentals in Industrial Networks": You should have basic knowledge of the topic "Ethernet" and should be familiar with topologies, transfer processes, addressing, data transport and understand the associated technical vocabulary. It is also helpful if you are familiar with the principles of operation of routers, switches, hubs and the OSI reference model. Basic knowledge of SIMATIC S7 and knowledge from the ST-PRO2 or ST-SERV2 courses is desirable.

Certification (Siemens CPIN-LEVEL)

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