SIEMENS

Online-Training - Controller Communication for Industry 4.0 and IoT (IC-IPCOM)

Short Description

With developments such as Industry 4.0 or IoT (Internet of Things), the boundaries between IT and OT (Information and Operation Technology) are becoming increasingly blurred. Automation technology is often no longer a closed system and the controller communicates far into the upper levels of the automation pyramid up to the cloud. In this course, we will give you an overview of current communication standards, give you various options for connecting SIMATIC Controllers to the above levels and equip you for communication in Industry 4.0 and the Internet of Things.

Objectives

You are familiar with various IP-based communication standards, can implement them purposive in SIMATIC Controllers and effectively implement the requirements of Industry 4.0 and IoT for communication in automation systems.
You will deepen your theoretical knowledge through numerous practice-oriented exercises in our virtual exercise environment Virtual Lab.

Target Group

- Automation engineers
- Programmers

Content

- Basics Industrial Ethernet
- Overview of communication options of SIMATIC Controllers
- Communication with standard protocols (Open User Communication)
- Network diagnostics (incl. Wireshark)
- Secure communication
- Introduction to OPC UA
- SIMATIC Controllers as OPC UA servers
- Introduction to IoT & cloud communication
- MQTT as standard for IoT and cloud communication
- Overview of communication options to the cloud

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. Here you will find web-based trainings on Industrial Communication as well as other topics such as Digital Enterprise, Industrial Automation Systems SIMATIC, Basics of Industrial Networks and many more. 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.

Prerequisites

- Basic knowledge of network engineering
- Knowledge according to TIA-PRO2
- Knowledge of SCL is an asset
- Technical requirements

Note

The Learning Membership starts 7 days before the start of the course and ends 14 days after the end of the course. During this period, you have access to all available web-based trainings.

Type

Online-Training

Duration

3 days

Language

en

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