SIEMENS

Controller Communication for Industry 4.0 and IoT / Controller Communication for Industry 4.0 and IoT (IK-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.

Target Group

Automation engineers
Programmers

Content

Basics Industrial Ethernet
Overview of communication options of SIMATIC Controllers
Communication with proprietary protocols
Communication with standard protocols
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

Prerequisites

Basic knowledge of network engineering
Knowledge according to TIA-PRO2
Good knowledge of SCL

Type

Face-to-face training

Duration

3 days

Language

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