SIEMENS

OPC UA – Basics and Configuration, Virtual (IK-OPCUA1E)

Short Description

This training offers you a detailed introduction into the basic concepts of the OPC UA system and its interfaces. You will learn the terminology behind the abstract model and test and deepen your understanding of it with several OPC UA capable components. You will learn about the most important OPC UA servers and clients in the SIMATIC product portfolio and will configure and program them in practical exercises. A continuous exercise concept will lead you gradually to a communication model that is solely based on OPC UA communication.

Objectives

At the end of this training you will be familiar with the basics, the terminology and the data models of OPC UA in the automation environment. You will understand the interaction of its components and be able to configure the most important OPC UA servers and clients of the SIMATIC product portfolio.

Target Group

Automation engineers
Programmers
Commissioning engineers

Content

Introduction to OPC
Infrastructure of OPC UA
Security of OPC UA
Information model, data access types and profiles of OPC UA
SIMATIC controllers as OPC UA servers and clients:
Configuring the OPC UA server
Programming OPC UA methods
Programming an OPC UA client
OPC UA Companion Specifications and modeling the server interface with SiOME
SIMATIC HMI products as OPC UA servers and clients
SIMATIC HMI Comfort/Mobile Panel
SIMATIC WinCC Runtime Advanced
SIMATIC WinCC Runtime Professional
SIMATIC NET OPC Server
Standard OPC UA clients (UaExpert, OPC Scout)
Performance of OPC UA connections
Diagnostics and debugging of OPC UA components

Prerequisites

Basic knowledge of network engineering
Knowledge according to TIA-PRO1 or TIA-SERV1

Note

The training is provided through MS Teams and the participant will have remote control of the virtual environment. The course teaching and material language is English. The material is provided for students in electrical form as pdf document.
Export control AL:n / ECCN:N

Type

Online-Training

Duration

3 days

Language

en

Fee

1,320 EUR

copyright by Siemens AG 2024