SIEMENS

OPC UA System Course (IK-OPCSYS)

Short Description

This training offers you a detailed introdocution 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 continous exercise concept will lead you gradually to a communication model that is soley 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

OPC UA gateways
- SIMATIC NET OPC Server
- SIMATIC CloudConnect 7

SIMATIC Ident RF600 Reader as OPC UA server
Integration of 3rd Party OPC UA servers using a 2D code reader
Standard OPC UA clients (UaExpert, OPC Scout)
Performance of OPC UA connections
Diagnostics and debugging of OPC UA components
Migration from OPC Classic to OPC UA

Prerequisites

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

As a part of your course booking you will receive free trial access to the digital learning platform: => Access to SITRAIN access
You have access to over 200 web-based training courses 7 days before the start of the course. The test period ends automatically 14 days after the end of the course.
Here you will find web-based trainings on SIMATIC OPC UA as well as other topics such as SIMATIC Automation Systems 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.

Type

Face-to-face training

Duration

4 days

Language

en, fr, nl