SIEMENS

Learning Journey - OPC UA mit SIMATIC Controllern (IK-OPCUA-LJ)

Short Description

Smart. Semantic. Secure. The open, Ethernet-based communication standard OPC UA (Open Platform Communications Unified Architecture) offers the best conditions for digitization.

On this learning journey, you will learn the basics of OPC UA and how to use the advantages of this communication standard in SIMATIC Controllers and WinCC Unified HMIs.

An optimal mix of guided live modules (online) and self-learning modules will provide you with all of the content imperative for your work and sustainable learning success. Various practical tasks in our virtual exercise environment throughout the Learning Journey help you to prepare for practical application. The Learning Journey provides curated on-demand content to support you in your own personal practice transfer.

More information on Learning Journeys

Objectives

After this Learning Journey, you can configure SIMATIC Controllers as OPC UA servers and program them as OPC UA clients. Additionally you can use WinCC Unified HMIs as OPC UA clients and can secure the entire OPC UA communication with encryption and authentication. You know OPC UA Companion Specifications and can implement those or individual server interfaces with TIA Portal and SiOME.

Target Group

- Programmers
- Engineering personnel

Content

This learning journey consists of:
- 5 live modules (3–4 hours each)
- 13 self-learning modules (approx. 8 hours)
- Curated on-demand content
- Individual transfer support in the form of a 1:1 coaching (1 hour)
A learning membership to work through the self-learning modules and access to on-demand content is included for 1 year.
Topics
- Basics of OPC UA
- Configuring SIMATIC Controllers as OPC UA servers
- Programming methods
- Realizing notification concepts with OPC UA Alarms & Conditions
- Securing OPC UA communication
- Implementing Companion Specifications or individual server interfaces with TIA Portal & SiOME
- Configuring WinCC Unified HMIs as OPC UA clients
- Programming OPC UA clients in SIMATIC Controllers

Prerequisites

- Basic knowledge of SIMATIC S7 according to the course TIA-PRO1 or TIA-SERV1.
- Technical requirements

Note

- Basic knowledge of networks
- Knowledge according to TIA-PRO2
- Basic knowledge of SCL
- Technical requirements

Type

Learning Journey

Duration

22 hours

Language

de