

# **OPCSYS 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**

Programmers, Commissioning engineers, Engineering personnel, Maintenance personnel, Service personnel, Operators

#### 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

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**

SIMATIC S7 knowledge according to ST-PRO2 or ST-SERV2 or S7-SYS2

### Type

Face-to-face training

### Duration

4 days

### Language

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