SIMATIC WinCC, System Course (ST-BWINCCS)

Short Description

WinCC V7.x is the proven and powerful SCADA system in the automation environment. Want to modernize or perform maintenance on your SCADA system or create a completely new SCADA system? Attend this training course, which is designed to help you learn the basic functions.

Objectives

The SCADA system (Supervisory Control and Data Acquisition) WinCC V7.x is designed for visualization and operator control of processes, production flows, machines and plants.

In this course, you will learn how to use SIMATIC WinCC easily and quickly for your applications. You will also be shown how to log messages and values and how to design and implement the appropriate logs. You can effectively use the engineering phase thanks to what you have learned about reliably operating the system.

After attending the course, you can do the following:

• Efficiently and reliably operate SIMATIC WinCC
• Understand and edit SIMATIC WinCC projects
• Optimal design an operator interface and selectively use faceplates
• Create screen navigation and user administration
• Implement logging concepts for messages, alarms and measured values
• Selectively access values from SIMATIC S7 and display and further process these values in WinCC
• Create user-defined scripts
• Understand the advantages of the openness of WinCC

Target Group

You are tasked with creating and/or editing WinCC projects. Whether you are someone who is just getting started or has already been exposed to WinCC, this course will provide you with new information so that you can work confidently with WinCC.

• Programmers
• Commissioning engineers
• Configuring engineers
• Service personnel
• Maintenance personnel
• Service personnel
• Operators

Content

• System overview of SIMATIC WinCC: for example, overview of the various WinCC licenses, possible system configurations
• WinCC projects: Creating projects, types of projects, data structure
• Communication with controllers: Overview of possible controllers, configuration of a connection to the SIMATIC S7, configuration limits for communication, diagnostic options
• Creating tags and groups, working effectively with the Configuration Studio, internal and external tags, system info channel, simulation of tag values
• Cross Reference Editor
• Benefits and opportunities of TIA
• Working effectively with the Graphics Designer
• Dynamization of objects in screens using tag connection, configuration dialog, dynamic wizard, animation, dynamic dialog, direct connection, C scripts and VB scripts
• Diagnostic and performance guidelines for C scripts and VB scripts
• Global Script Editor for user-created functions and screen-independent actions
• User administration: WinCC users and groups, authorization levels
• Faceplate technology via screen window with tag prefix and via faceplate types
• Tag logging: Archives and archive tags, archive configuration, types of archiving, OnlineTrendControl
• Alarm logging: Alarm procedures, alarm classes and types, archive configuration, alarm control, system alarms, status tags
• Data archiving with the User Archives option (introduce)
• Communication with S7-1500 (with PLCSIM Advanced)
• Report Designer for reporting (introduce)
• Deeper understanding of contents through practical exercises on SIMATIC S7-300 system model

Prerequisites

Basic knowledge of automation technology

Note

In this course, you will work with the SIMATIC WinCC V7.x (SCADA system). In the course, you will work with a WinCC single-user station. This communicates with a SIMATIC S7-300 and an S7-1500 (with PLCSIM Advanced).
As a supplement to this course, we offer the WinCC advanced course, TIA-WINOND.
For additional courses on SIMATIC WinCC V7.x, visit our Learning Path “SIMATIC WinCC V7.x”.
WinCC (TIA Portal) is divided generally into the machine-level area and SCADA systems.
For SIMATIC WinCC Comfort and SIMATIC WinCC Advanced (both products are based on TIA Portal), we offer the courses TIA-WCCM and TIA-WCCM2.
For SIMATIC WinCC Professional (SCADA system software based on TIA Portal), we offer the course TIA-WCCS.

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