

WinCC Advanced Course (ST-BWINOND)

Short Description

You have attended the WinCC V7.x system course and would like to add to your knowledge and skills. You will learn how to use WinCC options and handle large system configurations (e.g. client/server architectures, redundancy).

Objectives

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

- Troubleshoot errors in C and VB scripts more effectively
- Use WinCC as multi-user system (client/server architectures)
- Configure WinCC with redundant servers
- Configure WinCC for use with web clients
- Create reports with the information server
- Provide contents from WinCC databases (WinCC message and trend archives) with database options for your own applications
- Configure more efficiently
- Get started with automated configuring

Target Group

You have already attended the "SIMATIC WinCC (ST-BWINCCS)" system course or have equivalent prior knowledge and want to further add to your knowledge.

- Programmers
- Commissioning engineers
- Configuring engineers
- Service personnel
- Maintenance personnel
- Service personnel

Content

- In-depth training on Visual Basic Script (VBS actions and VBS object structures)
- In-depth training on C scripts in WinCC
- Introduction of WinCC database (dimensioning of Runtime databases)
- Introduction to networks (TCP/IP, subnetting and name resolution)
- WinCC server (WinCC client with and without project)
- WinCC redundancy option
- Time synchronization (client/server, redundancy)
- WinCC Web Navigator Web option
- WinCC Web UX Web option
- Introduction to Process Historian
- WinCC Information Server Web option
- Cross-system communication: OPC, WinCC options Connectivity Pack/Station, IndustrialDataBridge
- Efficient configuration: CrossReference, ApDiag.exe diagnostic tool
- VBA for automated configuration in Graphics Designer
- Overview of WinCC options: ODK with IndustrialX, User Archive, Simatic Logon, Change Control and Audit, Energy Manager, Calendar Scheduler, Event Notifier, Performance Monitor
- Deeper understanding of contents through practical exercises

Prerequisites

Knowledge of SIMATIC WinCC corresponding to ST-BWINCCS (system course).

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).

The prerequisite for this course is the basic WinCC course, ST-BWINCCS.

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.

Type

Face-to-face training

Duration

5 days

Language

en