SIEMENS

Online: SIMATIC TIA Portal Service 2 for PLS (TIA-SERV2)

Short Description

You can deepen your theoretical knowledge with numerous practical exercises on a TIA system model. This consists of a SIMATIC S7 automation system, ET 200 distributed I/O, Touchpanel, drive, and a belt model.

Objectives

The Totally Integrated Automation Portal (TIA Portal) forms the work environment for integrated engineering with SIMATIC STEP 7 and SIMATIC WinCC.
The second part of the SIMATIC TIA Portal service training is based on the knowledge of the TIA Portal gained in the SIMATIC TIA Portal service 1 course, including SIMATIC STEP 7, HMI, connection of drives, and PROFINET IO. You will expand your troubleshooting and error correction knowledge using the TIA Portal diagnostic tool in the commissioning and productive phase. Alarms are displayed on an operator control and monitoring system. You will learn about the included test functions for controlling programs in Structured Control Language (SCL). You will implement a sequence control in SIMATIC S7-GRAPH and integrate the analog value processing.
You will thus be able to adapt your plant to new demands and to reduce downtime.
After attending the course, you can do the following:
• Understand the interaction of TIA components
• Understand, adapt, and expand given STEP 7 programs, including with step sequences and analog value processing
• Systematically diagnose and correct hardware and software errors in the SIMATIC S7 automation system with the diagnostic tools of the TIA Portal engineering portal
• Use the test functions in Structured Control Language (SCL)
• Perform specific commissioning of TIA components
• Adapt your WinCC configuration to new requirements through small modifications or extensions

Target Group

Maintenance personnel
Service personnel
Operators

Content

Hardware diagnostic functions of the TIA Portal in the SIMATIC S7 automation system
Software diagnostic functions of the TIA Portal in the SIMATIC S7 automation system
Possible applications of various block types (function (FC), function block (FB), organization block (OB), data block (DB))
Principles of analog value processing
Sequence control with S7-Graph
Commissioning of distributed I/O on PROFINET IO
Alarm configuration in WinCC
Parameterization of the drive
Test functions in Structured Control Language (SCL)
Deeper understanding of contents through practical exercises on the SIMATIC S7-1500 system model

Prerequisites

SIMATIC S7 knowledge corresponding to TIA-SERV1 and practical experience in using the knowledge
You can use the available online entry test to ensure that the selected course matches your area of expertise.
This blended learning course combines web-based training (WBT) on the Internet with a 5-day attendance course: To prepare for the classroom course, you will receive the WBT "PROFINET". This allows you to improve your personal learning achievement in the attendance course.

Note

In this course you will work with SIMATIC S7-1500 and software SIMATIC STEP 7 based on TIA portal – for SIMATIC S71-1200 we offer the trainings TIA-MICRO1/2.
This is the second of two courses to prepare you for certification as a "Siemens Certified Service Technician Level 1, based on TIA Portal" (CPT-FAST1).
This is the second of three courses to prepare you for certification as a "Siemens Certified Service Technician Level 2, based on the TIA Portal". Both tests are modules of the "SITRAIN Certification Program
Documentation in English.
Register in the calender one week before the training starts.

Type

Face-to-face training

Duration

5 days

Language

no