SIEMENS

SIMATIC Service 2 in TIA Portal (TIA-SERV2)

Краткое описание

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 and PROFINET IO. You will expand your troubleshooting and error correction knowledge using the TIA Portal diagnostic tool in the commissioning and productive phase. You will learn how the CPU behaves if it detects an error. You expand your knowledge of program design by learning about other program structure options and gaining an initial insight into a component of the Structured Control Language (SCL) programming language. You can display messages on an operator control and monitoring system. You will get to know the interrelationships in process control in connection with analog value processing and will then be able to configure, test and diagnose analog process signals. You will thus be able to adapt your plant to new demands and to reduce downtime.

Цели

After attending the course, you can do the following:
- Understand the interaction of TIA components even better
- Perform specific commissioning of TIA components
- Systematically diagnose and correct hardware and software errors in the SIMATIC S7 automation system with the diagnostic tools of the TIA Portal
- Understand, adapt, and expand given STEP 7 programs with analog value processing
- Recognize blocks programmed in Structured Control Language (SCL) and understand simple functionality
- Adapt your WinCC configuration to new requirements through small modifications or extensions

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 and a belt model.

Целевая группа

Maintenance personnel
Service personnel

Содержание

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
Commissioning of distributed I/O on PROFINET IO
Alarm configuration in WinCC
Introduction in Structured Control Language (SCL)
Deeper understanding of contents through practical exercises on the SIMATIC S7-1500 system model
In addition, the following content is available in your personal training documents
- Introduction to GRAPH
- Technology object with the G120

Included in the course price: Free access to the digital learning platform SITRAIN access — starting one week before the start of the course until two weeks after the end of the course. Here you will find web-based trainings on TIA Portal - Diagnostics with Trace and SIMATIC Controllers, and many more. With the Learning Membership, you can deepen or repeat the content of this Learning Event as well as continue your education on other interesting topics.

Требования к участнику

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.

- Online Assessment Test

Примечания

In this course you will work with SIMATIC S7-1500 and software SIMATIC STEP 7 based on TIA Portal.
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).
The examination is a "SITRAIN Certification Program" module.

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"

The Learning Membership starts 7 days before the start of the course and ends 14 days after the end of the course. During this period, you have access to all available web-based trainings.

Тип

Очный тренинг

Продолжительность

5 Дн.

Язык

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