

Virtual Commissioning (DI-VIRTCOM)

Type

Instructor-led Learning

Duration and Continuing Education Units (CEU)

3 Days

2 CEUs

Target Group

- Programmers
- Engineers
- Commissioning Engineers

Short Description

Today's technologies are so complex that training on the software and the appropriate training equipment is almost indispensable to keep up to date. This course targets project engineers, project planners and programmers of mid-level and big industries, who deal with the design and virtual commissioning of machines. The documentation and course work provides you with an overview of the interaction among the various software packages such as TIA Portal, PLCSIM Advanced and OPC UA and MQTT.

Objectives

- Describe how to achieve greater efficiency in the design, automation, and commissioning of machines
- Evaluate varying types of simulation
- Design and automate serial processes and parallel work
- Test projects during the design phase
- Virtually commission initial testing from remote locations without the need of a real PLC

Content

- Introduction of concepts for virtual commissioning
- Using TIA Portal Software Units for commissioning software with Multiple software developers at the same time
- Verification of TIA portal programs using software Test Suit tool to ensure program reliability
- Using Add Ons subroutines to clean the program from unused signals
- Expansion and modification of the virtual machine
- Use of the OPC UA protocol communication using UA Expert
- Identify the use of MQTT protocol
- Review cyber security concepts and what Siemens offerings are for Simulation and

Protection

Mandatory Prerequisites

[SIMATIC Programming 2 in TIA Portal: SCT-TIAPR2](#)

Language

English

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