

Virtual Commissioning (DI-VIRTCOM)

Type

Instructor-led Learning

Duration and Continuing Education Units (CEU)

5 Days

3.3 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 NX, MCD, TIA Portal, PLCSIM Advanced and SIMIT.

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
- Complete software-in-the-loop approach
- Working with PLCSIM Advanced and TIA Portal
- Introduction to Siemens PLM Software NX and MCD
- Creating drawings in the NX CAD system
- Creating and positioning machine elements in the NX CAD system
- Preliminary planning of the program flow in NX MCD
- Connection of NX / MCD models to PLCSIM Advanced (with TIA Portal)
- Automating using the virtual machine model
- Virtual commissioning of custom machines

- Expansion and modification of the virtual machine
- Introduction of process simulation with SIMIT

Mandatory Prerequisites

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

Note

New possibilities for the interaction of design and automation, from serial processes to parallel work. Automation can already begin and be tested during the design phase. The interaction of design and automation allows initial tests and virtual commissioning in the office without the need for a real machine or PLC.

Language

English

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