SIEMENS

Online Training - SIMATIC S7-300 & S7-400 with SIMATIC Manager (CO-CLS3040)

Objectives

To make participants aware and familiar with:
- SIMATIC S7-300/S7-400 automation system
- STEP7 Classic software (SIMATIC Manager)
- Basic programming concepts in STEP7
- Troubleshooting of S7-300/S7-400 system

Target Group

- Service engineers
- Programmers
- Commissioning engineers
- Maintenance engineers

Content

Hardware topic:
- SIMATIC S7-300 hardware detailed information, protocols, DI/DO module wiring, LED's explanation, front indicators
- SIMATIC S7-400 family in detail
- Hardware configuration of SIMATIC controller in STEP7

SIMATIC Manager topics:
- SIMATIC Manager i.e. STEP7 Classic software overview
- Licensing concept for STEP7

Software and Programming concepts:
- Working with symbol table
- Bit logic instructions
- Programming rules
- Timers and counters
- Working with VAT tables
- Analog value processing
- Linear v/s structured programming approach
- Effective programming using function and function blocks
- Use and need of data blocks
- Types of data blocks
- Concept of Organization blocks

Communication – Offline demo:
- S7-300/S7-400 controller with remote station on Profinet(PN)/Profibus DP protocol

Troubleshooting and diagnostic topics:
- Significance of LED indication on different modules
- Diagnosis using diagnostic buffer
- Cross-references, call structure, assignment list, dependency structure
- Memory overlap identification
- Project backup
- Forcing, renaming, and rewiring concepts
- Project comparison

HANDS ON:
- Application example-based exercises after each topic.

Prerequisites

- Basic know how about automation technology is must
- Basic knowledge of electrical technology and digital electronics is essential

Note

TECHNICAL REQUIREMENT:
- A computer or laptop with Windows 7/10 OS and a stable internet connection. (We recommend a data transfer rate of 16 Mbit/s.)
- Microsoft Teams platform for technical presentations and demo.
(We recommend using desktop app for best possible use of all functions).
- Goggle Chrome internet browser for assessing virtual lab solution for hands-on

Type

Online-Training

Duration

6 days

Language

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