SIEMENS

SIMATIC HMI Panel with WinCC Flexible

General Information

Course Code: SCT-S7WFXC1A
Length: 4½ Days

Audience

This course is for automated control engineers or maintenance staff who will be designing, configuring or maintaining a control system application configured with Siemens WinCC Flexible software.

Prerequisites

- S7 Automation Maintenance 1

OR

- S7 Programming 1

Profile

2.9 CEUs (Continuing Education Credits)

This course provides a comprehensive review of the features and capabilities of Siemens WinCC Flexible software. Students will perform a complete system configuration including project configuration, graphics design and system integration. Students will also build skills with the user management tools including security, access, alarms and messaging. Advanced functionality such as recipe creation and scripting are briefly introduced through scenario applications. The course concludes with Siemens unique Sm@rt services for plant wide web and system access.

Throughout this course lecture materials are complimented with hands-on exercises which build a working WinCC Flexible application.

Objectives

Upon completion of this course, the student shall be able to:

- Create and manage a WinCC Flex project.
- Integrate components between WinCC Flex and STEP 7.
- Create tags from the STEP7 symbol table.
- Design graphic screens and tools.
- Configure internal and external tags.
- Define & administer user security.
- Set and test the Alarms and Messages.
- Configure, archive and display trends.
- Understand basic recipe building.
- Understand basic scripting services.

- Understand Sm@rt Services.

Topics

1. WinCC Flexible System Overview
   a. WinCC Flexible Components
   b. Software Configurations
   c. Engineering System
   d. Migration from ProTool / ProTool Pro to WinCC Flexible
   e. Options and features overview
2. The Project
   a. Project components & configuration
   b. Program loading
   c. Configuring NetPro
   d. WinCC Flex Settings & Languages
3. Basic Graphics Design
   a. The Screen Editor
   b. Screen hierarchy
   c. Screen templates
   d. Objects
   e. Importing & exporting graphics
   f. Configuring I/O
   g. Text lists
   h. Buttons & switches
   i. Animation
4. Advanced Graphics Design
   a. Adding panels with Assistant
   b. Network configuration
   c. Navigation Editor
   d. Layering
   e. Libraries
   f. Faceplates
   g. Configuration Tools
5. The Message System
   a. Message Procedures
   b. Message Classes
   c. Message Configuration
   d. Alarm Classes
   e. Acknowledgments
   f. Message archiving
6. User Management
   a. Access Protection
   b. Creating User Management
   c. Authorizations
   d. User management
   e. Log-in/out & passwords
7. Process Value Archiving
   a. Archive versions
   b. Process value archives
   c. Trend curves

8. Recipe Management
    a. Recipe structures
    b. Syncronization
    c. Recipe editor & configuration
    d. Recipe management
9. Run-Time Scripting
    a. Run time functions
    b. Script editor
    c. The object model
    d. Debugging
10. Sm@rt Access and Service
    a. Plant wide system access
    b. Sm@rt Client distributed stations
    c. Sm@rt Server
    d. HTTP plant wide access
    e. Linking panels to the office
    f. Sm@t Service e-mailing
    g. Web access HTML pages