# **SIEMENS**

# Automation - SIMATIC HMI with TIA Portal Call 770-625 SiVArc – Automatic Visualization Generation

## **General Information**

Course Code: SCT-SIVARC-1 Length: 1 Day

#### Audience

This course is for automation system design managers, project managers, programmers, configuration and commissioning engineers.

#### Prerequisites

TIA Portal WinCC Advanced

#### Profile

#### 0.6 CEUs (Continuing Education Credits)

The objective of this course is to standardize the visualization of user interfaces throughout the plant while reducing engineering overhead. This is accomplished with automatic generation and creation of an operator control and monitoring solution, based on the program code of the controller and corresponding visualization objects as part of the comprehensive library concepts.

The basics and the various options and concepts offered by SiVArc throughout the course is covered, along with configuration of a visualization generation step-by-step. A standardized PLC project will form the basis for creating the visualization generation.

Theoretical knowledge will be reinforced through practical exercises. A complete visualization generation will be realized by the end of the training.

#### **Objectives**

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

- Identify SiVArc option and concepts
- Configure rule-based HMI screen generation
- Add dynamics to automatically generated screens
- Reinforce theoretical knowledge
- Generate a complete visualization

### Topics

- 1. Introduction
  - a. Application case:
  - b. Description of application problem
  - c. Overview of SiVArc solution
- 2. Generating objects and screens
  - a. Making templates
  - b. Screen rules
  - c. Behavior of screens created with SiVArc
- 3. Dynamizing objects
  - a. Identifying SiVArc properties
  - b. Retrieving data from the PLC
  - c. Accessing different block call levels
  - d. Trigger blocks
  - e. Dynamically configuring tags
- 4. Positioning objects
  - Layout fields
  - b. "Show layout field" property
- 5. Reusing library objects
  - a. Tag rule "Tag table"
  - b. Tag rule "Tag group hierarchy"
  - c. Copy rule
  - d. Screen rule "Conditions"
  - e. Dynamic Layout fields
  - f. Text list rule
- 6. Conclusion
  - a. Supported systems
  - b. Supported HMI objects

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