# **Siemens SCADA Systems: Mastering WinCC Advanced Configuration and Administration**

### **Course Description:**

This course is designed to provide an in-depth understanding of Siemens SCADA systems, with a focus on WinCC Advanced. Participants will explore the architecture, configuration, and administration of WinCC Advanced, covering essential aspects such as data acquisition, communication, and visualization. The course includes practical sessions on project creation, basic and advanced configurations, alarm management, data logging, trend configuration, recipe management, and user administration. Hands-on exercises are integrated to ensure participants gain the skills necessary to efficiently manage SCADA systems using WinCC Advanced.

## **Audience Profile:**

This course is intended for automation engineers, system integrators, and IT professionals responsible for deploying and maintaining Siemens SCADA systems, particularly those using WinCC Advanced. It is also suitable for individuals aiming to specialize in WinCC Advanced for industrial automation projects.

### **Prerequisites:**

Participants should have a foundational understanding of industrial automation, familiarity with Siemens PLCs, and a general knowledge of SCADA systems. Experience with industrial networks and basic programming concepts is beneficial but not required.

# **Course Objectives:**

By the end of this course, participants will be able to:

- Understand the architecture and core functions of Siemens SCADA systems, with a focus on WinCC Advanced.
- Create and manage SCADA projects using WinCC Advanced, including device integration and network communication.
- Configure both basic and advanced features within WinCC Advanced, such as graphic views, alarms, data logging, and trend analysis.
- Manage recipes and user administration within WinCC Advanced, ensuring secure and efficient operation.
- Apply practical skills through hands-on exercises in configuring and managing SCADA systems with WinCC Advanced.

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  - o Data Communication in SCADA Systems
  - Data Presentation and Visualization
- Comparison of PLC and PC
- Examples of SCADA Applications

# Module 2: Project Creation & Basic Exercises in WinCC Advanced

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- Basic Exercises with Push Buttons and Displays

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