

Process Visualization Control 1 | Interactive eLearning

Introduction to Process Visualization - WX33305-CA01UEN-E1

Objective 1: Describe the Function of Process Visualization Software

Process Visualization Software

Operators working with automated systems can be aided by having just the right information and controls at their fingertips. These interfaces might appear on dedicated displays but many times are simply on a computer screen.

Two software packages that can create these screens are Siemens WinCC Advanced and Allen-Bradley's FactoryTalk View Studio. They are two examples of the type of software known as process visualization software.

The screenshot shows a 3D visualization of a process. On the left, a computer monitor displays a 2D schematic of a tank with two valves labeled 'Open' and 'Closed'. A red arrow points to a 'Setpoint' line on the tank. Below the tank, a flow rate is indicated as '25 Gal.'. In the center, a 3D rendering of the tank is shown with blue liquid inside. On the right, there are two robotic grippers. The bottom right corner of the slide shows a speaker icon, a menu icon, 'Page 2 of 79', a refresh icon, and navigation arrows.

eLearning Course: M33305

This course covers SCADA (Supervisory Control and Data Acquisition) that allows operators, technicians, and engineers to monitor and control process applications using sensors networked to equipment on the plant floor. Specific topics of study include introduction to process visualization, UDC controller configuration, process visualization system operation, application editing, project screens, input and output objects, two-state output objects, symbolic I/O field output objects, I/O field objects, and alarms.

Interactive eLearning

Amatrol's eLearning curriculum is unique in that it thoughtfully combines in-depth theoretical knowledge with practical, hands-on skills. This powerful combination of knowledge and skills solidifies understanding and creates a strong foundation for pursuing more advanced skills.

For example, the precision gauging eLearning course covers important topics, such as:

Introduction to Process Visualization

Learners begin with an introduction to process visualization control, including OPC server software configuration, process visualization software, UDC controller configuration, and process visualization system operation. Individual lessons focus on topics like function of process visualization software, basic operation of OPC server software, structure of the TIA Portal WinCC advanced software, function of the process instrument explorer software, and two classifications of screen objects. Learners will also practice skills, such as configuring WinCC Advanced and Kepware OPC Server softwares to communicate with a Honeywell PID controller, configuring the IP address of a UDC controller, and operating a process using WinCC Advanced Runtime.

Application Editing 1

In this module, learners will study components of application editing, including WinCC Advanced software, project screens, and input/output objects. Individual lessons focus on topics like components of a WinCC Advanced project, project screen configuration, and tag configuration in a WinCC Advanced process visualization project. Learners will also practice skills, such as creating and formatting a project screen with text objects, creating a button input object, and configuring a symbolic I/O field output object.

Application Editing 2

The Process Visualization Control eLearning module concludes with application editing 2, where learners will study I/O field objects and alarms. Individual lessons focus on topics like function and configuration of an I/O field object, function of two types of soft alarms, and configuration of an analog alarm using WinCC Advanced. Learners will also practice skills, such as creating an I/O field object as an input, configuring an I/O field object as an output, and configuring an alarm message in WinCC Advanced.

Additional Info

Requires:

- Computer (see [Computer Requirements](#))

Options:

- Visualization Process Control 1 Learning System ([T5552-S1](#))

Address

**Amatrol
2400 Centennial Blvd
Jeffersonville, IN 47130**

Contacts

**email: contact@amatrol.com
phone: (800) 264 8285**