Proficy HMI/SCADA CIMPLICITY Advanced

Course Description

The *Proficy HMI/SCADA – CIMPLICITY Advanced* course will introduce the students to configuring Servers and Viewers, OPC Client and Server, Advanced Viewer, Database Logger & SQL Server Express, use variables with Linked Objects, Server Redundancy, Alarm Viewer custom buttons, Classes and Objects, VisiconX and Dynamic Graphic Replay (DGR).   An experienced instructor is provided to guide the student using demonstrations and hands on lab exercises.

Who Should Attend?

This course is designed for Application Engineers and System Managers.

Are There Any Prerequisites?

Participants should have a working knowledge of Windows operating systems.   Participants must have completed the Proficy CIMPLICITY Fundamentals course.

What Tasks Will Be Taught in This Class?

Upon completion of this Course, the student will be able to:

- Configure Client nodes (Viewers)
- Connect CIMPLICITY OPC Client to a 3rd party OPC Server
- Connect a 3rd party OPC Client to CIMPLICITY OPC Server
- Use variables with Linked Objects
- Configure ODBC Data Sources
- Create custom buttons for the Alarm Viewer
- Use the Advanced Viewer
- Work with Classes and Objects
- Configure Server Redundancy
- Use VisiconX objects to display data
- Use the DGR

Course Length

3 days

Suggested Class Size

10 students

Class Hours

8:00 am - 5:00 pm, daily

Course Agenda

(Schedule and content may vary.)

Day 1

Morning

Client (Viewer)/Server Setup
Understand the client/server architecture, learn the key features in developing screens for Viewers, connect a client to a server and locally load screens on a viewer.

Project Security
Learn about the essential tools for securing the HMI/SCADA environment.

Introduction to OPC
Overview of what OPC is and how it is used.

Afternoon

OPC Client
Overview of OPC Client, review the supported features, client configuration checklist – port, device and points, DCOM overview.

OPC Server
Overview of OPC Server, OPC Client/Server architecture, OPC Server User Interface, configuration and troubleshooting.

Advanced Viewer
Build a display to connect to an OPC Server directly, without creating Server points.

Day 2

Morning

Database Logger and SQL Server Express
Work with SQL Server Express as the data repository for CIMPLICITY Data.

Using Variables
Use variables to build your screens quickly and efficiently.

Afternoon

Using VisiconX
Build data-rich screens with SQL-querying capabilities using these pre-built, wizard-configurable objects.

Script Execution
Build Screen Scripts, use the Event Manager to execute them and display script output visually.

Day 3

Morning

Classes and Objects
Plan a class, import a class, configure class attributes, configure data items, write class scripts, events and actions, create a CimEdit screen and create an Object.

Server Redundancy
Overview of Server Redundancy for Automatic and Manual, hardware and software requirements, configure redundancy and parameters and review the recovery procedures.

Afternoon

Alarm Viewer Custom Buttons
Modify the Alarm Viewer to use custom buttons for Alarm Management.

Dynamic Graphic Replay – DGR
Build screens to review and diagnose issues within your process.   Learn how DGR gives you an instant replay of your process events in your HMI screens.

Supplemental

WebView

Historian Integration

Change Management Integration