



Proficy Process Systems Fundamentals

Course Description

The *Proficy Process Systems Fundamentals* course is designed to provide a good working knowledge of Proficy Process Systems. This course explores the solution architecture, features and configuration tools from the controller, through Data Acquisition and Management to Visualization. Valuable hands-on lab exercises are provided to guide students through the building and modification of the system and its constituent components.



Who Should Attend?

This course is designed for process, automation or instrumentation engineers and system integrators who will be developing, configuring and using applications on a fully integrated Proficy Process System.

Are There Any Prerequisites?

Participants should have a working knowledge of Windows operating systems. Control Systems experience and knowledge is an asset.

What Tasks Will Be Taught in This Class?

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

- Introduce the Proficy Process Systems solutions.
- Use the Engineering Workstation to configure Controllers & IO.
- Use the EWS to create a PPS project.
- Configure PPS Control Hardware.
- Program with EWS-Logic Developer.
- Work with PPS Function Blocks.
- Understand Ethernet Global Data (EGD) and the Global Namespace.
- Configure EWS-CIMPLICITY and/or EWS iFIX project essentials.
- Develop EWS-CIMPLICITY and/or EWS-iFIX visualization.
- Design PPS Controller and IO networks.
- Build Controller-based alarming.
- Develop Alarm displays for CIMPLICITY and iFIX.
- Work with EWS utilities.
- Build reusable code (User-defined function blocks - UDFBs).
- Collect and review archived data with Proficy Historian.
- Access system and configuration files with Proficy Change Management.
- Load and explore a sample project.

Course Length: 4 days

Suggested Class Size: 8 students

Course Hours: 8:30 am – 5:00 pm, Tuesday through Friday



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Course Agenda

Day 1

Morning:

Introduction to Proficiency Process Systems.

An overview of the Proficiency Process Systems and its solutions.

Eng. Workstation: Controllers & IO

Use the EWS to prepare a PPS controller.

Creating a Project

Configure fundamental project settings to prepare for development.

Afternoon:

Hardware Configuration.

Configure the controllers.

Programming with Logic Developer

Provide an orientation to the control programming environment.

PPS Function Blocks

Use PPS Function Blocks to build controller logic.

Day 2

Morning:

Ethernet Global Data (EGD)

See how the Global Namespace is constructed and driven by EGD.

EWS- CIMPLICITY Project Essentials

Prepare CIMPLICITY for PPS visualization.

EWS- iFIX Project Essentials

Prepare iFIX for PPS visualization.

Afternoon:

EWS- CIMPLICITY visualization

Use CIMPLICITY to build displays using PPS faceplates and the Global Namespace.

EWS iFIX visualization

Use iFIX to build displays using PPS faceplates and the Global Namespace.

Day 3

Morning:

Hardware and IO Networks

Receive an overview of PPS Hardware and IO design principles.

Controller-Based Alarming

Set Alarming in the Controllers.

Building Alarm Displays – CIMPLICITY

Use EWS-CIMPLICITY to view alarms.

Afternoon:

Building Alarm Displays – iFIX

Use EWS- iFIX tools to build Alarm Displays

EWS utilities

Explore useful EWS utilities for development, troubleshooting and maintenance

Day 4

Morning:

Build Reusable Code

Discover the power of User Defined Function Blocks (UDFBs)

Historian

Archive important system data values.

Afternoon:

Change Management

Control access and changes to system files. Provide version control of critical configuration files.

Explore a Sample Project

Work inside a fully functioning sample system.