Proficy CIMPLICITY Fundamentals

Course Description
The *Proficy HMI/SCADA CIMPLICITY Fundamentals* course is an entry-level course focusing on the multiple aspects of project configuration. Valuable hands-on lab exercises are provided which guide students through the building and modification of the HMI application.

Who Should Attend?
This course is designed for Operators, Application Designers, and System Managers.

Are there any prerequisites?
Participants should have a working knowledge of Windows operating systems. Previous controls and HMI/SCADA experience is an asset.

What topics will be covered in this course?
Upon completion of this course, the student will be able to:
- Create and configure a new Project including the Point Database of the project.
- Configure graphic screens.
- Create Events and Actions using the Script Engine, including simple scripts using a VB compliant language.
- Create Database Logging tables.
- Create and modify Trend Charts and Alarm Viewers.
- Work with Linked Objects.
- Work with Smart Objects.
- Work with the various Animation capabilities of CIMPLICITY HMI.
- Use native and 3rd party ActiveX controls in CIMPLICITY HMI screens.
- Work with Screen Variables to build displays quickly and efficiently.
- Build an elegant navigation scheme using the Navigation Configuration tools.

Course Length
4 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:**

**Introduction to CIMPLICITY HMI**  
Study the basic features and design of CIMPLICITY software.

**Project Configuration**  
Create a new CIMPLICITY project and configure ports, devices, resources, users and roles.

**Afternoon:**

**Point Configuration**  
Create and configure the point database for the classroom project.

**Point Control Panel**  
Use the Point Control Panel to verify the project’s points.

## Day 2

**Morning:**

**Graphics**  
Create the main project screen. More screens are created throughout the duration of the course.

**Afternoon:**

**Alarm Configuration**  
Configure project points for alarming. Configure Alarm Classes, Alarm Strings and Alarm Help files. Use the Alarm Sound Manager.

**Alarm Viewing**  
Configure and use the various Alarm Viewers. Create an alarm print file.

## Day 3

**Morning:**

**Linked Objects**  
Create linked objects for use on project screens.

**Script Engine**  
Create simple scripts using the Script Editor. Create and configure Events and Actions using the Event Editor. Use the BCEUI to trigger and test events.

**Afternoon:**

**CimEdit Scripts**  
Create scripts within CimEdit and configure procedures to invoke the scripts.

**Animation Techniques**  
Use various animation techniques to modify the main project screen to provide better functionality and operator feedback.

## Day 4

**Morning:**

**Database Logger**  
Create logging tables to log project point data. Query the database from Excel. Link SQL logging tables to Access. Use the Historical Alarm Viewer to access logged data.

**Trending**  
Access and use Quick Trends. Create and configure screens with embedded Trend charts.

**Smart Objects**  
Create a screen using Smart Objects. Modify Smart Objects and add them to a graphics library.

**Afternoon:**

**ActiveX Controls**  
Access ActiveX methods associated with Trend charts. Embed 3rd party ActiveX controls in a CIMPLICITY screen.

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

**Navigation Configuration**  
Use the Navigation Configuration tools in CIMPLICITY to rapidly develop a scheme for viewing sets of displays.