

## 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 Tasks Will Be Taught in This Class?

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 Basic Control 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 3<sup>rd</sup> 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.

##### Basic Control 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 3<sup>rd</sup> 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.

