



# Proficiency HMI/SCADA iFIX Advanced

## Course Description

The **Proficiency HMI/SCADA iFIX Advanced** course is designed to pick up where the iFIX Fundamentals course ends. The course is intended to provide the student a base level of proficiency using some of the product's more advanced features. The student will become familiar with some of the tools and concepts available for optimizing and troubleshooting iFIX.



## Who Should Attend?

This course is principally designed for process, automation, or instrumentation engineers and system integrators who will be developing, configuring, and using applications created with iFIX.

## Are There Any Prerequisites?

Completion of Proficiency HMI/SCADA iFIX Fundamentals course (44A728312-154) is a must! Participants should have a working knowledge of Windows 2000, Windows NT 4.0, and/or Windows XP operating systems. Familiarity with relational databases and VBA would be helpful, but not required.

## What Tasks Will Be Taught in This Class?

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

- Integrate iFIX with OPC servers and Clients
- Advanced configuration with Database Blocks
- Integrate iFIX with Proficiency Historian
- Integrate iFIX with Relational Databases (RDBs)
- Use VisiconX to build graphical RDB tools for users
- Extend iFIX Alarm systems to RDBs and Proficiency Historian
- Work with Charts and Chart Groups
- Master Dynamo creation and maintenance
- Work with ActiveX components
- Develop schedules to automate workflows and processes
- Drive reports with iFIX
- Configure Server enhanced Failover
- Prepare iFIX for use with Terminal Server

**Course Length:** 4 days

**Suggested Class Size:** 8 students

**Course Hours:** 9:00 am – 5:00 pm



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**Course Agenda** *(Schedule and content may vary.)*

## Day 1

### Morning:

#### **iFIX Architecture and Applications**

Review of iFIX Architecture, Applications and course system.

#### **Introduction to OPC**

Understanding OPC, it's purpose, history and terminology.

### Afternoon:

#### **iFIX OPC Clients and Servers**

Look at the OPC Client and Server interfaces available within iFIX. Work with OPC AE Server in iFIX.

#### **Database Blocks**

Extend chain functionality, use the Program Block, add loadable blocks using BTKCFG.

## Day 2

### Morning:

#### **Integration with Proficy Historian**

Collect, store and retrieve data and alarms from iFIX with Proficy Historian.

#### **Integration with Relational Databases**

How to integrate RDB's with iFIX, write simple SQL queries.

### Afternoon:

#### **Use iFIX SQL Blocks with RDB's**

Set up SQL Blocks in the PDB to execute SQL queries and interact with RDB via ODBC.

#### **Use Workspace to access RDB's**

Explore and display scripting requirements and the mechanism for data exchange between Workspace and RDB's.

## Day 3

### Morning:

#### **iFIX Alarm Archiving**

Set up iFIX to send Alarms to ODBC and OPC A&E, Use VisiconX to view RDB Alarms.

#### **ActiveX in iFIX**

Add, manipulate and work with ActiveX Controls in Workspace.

### Afternoon:

#### **Charts and Chart Groups**

Look at Charts and their functions, build and deploy chart groups.

#### **Dynamo Creation and Maintenance**

Develop Dynamos and Dynamo sets, create Master Dynamos, deploy and update Dynamos.

## Day 4

### Morning:

#### **Schedules**

Create and test Time and Event based Schedules.

#### **Reporting**

Identify iFIX Report sources, using ODBC with Excel, Access. Deliver reports via iFIX Workspace.

#### **Enhanced Failover**

Configure, implement and diagnose Enhanced Failover Option.

### Afternoon:

#### **Integration with Change Management**

Use Change Management with iFIX projects, making changes, viewing history and comparing versions.

#### **iFIX Terminal Services**

Discuss TS with iFIX, prepare O.S for TS use, prepare iFIX for TS use.