

iFIX Advanced Development

Course Description

iFIX Advanced Development concentrates on the skills and knowledge required to extend the core functionality of iFIX. In addition, there are a range of topics that discuss the integration of iFIX applications with external systems such as historians, relational databases, office and reporting applications as well as other automation applications.



Who Should Attend?

This course is designed for developers responsible for building and implementing full-featured iFIX HMI/SCADA systems. These topics focus on integration and programming and will be beyond the needs of most casual users.

Are There Any Prerequisites?

Completion of iFIX Fundamentals is a prerequisite for taking this course. Prior exposure to programming (in any language) is of benefit as is prior exposure to relational databases and SQL.

What topics will be covered in this course?

- Integrate iFIX with OPC servers and Clients
- Advanced configuration with Database Blocks
- Integrate iFIX with Proficy Historian
- Integrate iFIX with Relational Databases (RDBs)
- Use VisiconX to build graphical RDB tools for users
- Extend iFIX Alarm systems to RDBs and Proficy 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 Fail-over and Redundancy
- Prepare iFIX for use with Terminal Server

Course Length

3 days

Suggested Course Size

10 students

Course Hours

8:30 am - 5:00 pm, daily



Course Agenda

(Schedule and content may vary.)

Day 1

Morning:

Review iFIX

Review the basic features and functions of iFIX software.

Review iFIX Architecture & Applications

Walkthrough the essentials of iFIX applications and the system architecture.

Introduction to OPC

Find out more about the OPC communication methods available to industrial control applications.

Afternoon:

OPC Clients

Learn more about the myriad ways of using OPC to connect iFIX sub-systems as data clients of other applications.

OPC Servers

Learn more about the myriad ways of using OPC to configure iFIX sub-systems as data servers

Database Blocks Redux

Delve deeper into the Process Database and the blocks available to iFIX SCADA applications.

Day 2

Morning:

Integrate iFIX with Proficy Historian

Learn about the tools available for seamlessly integrating iFIX to Proficy Historian, including tools for both providing and retrieving data.

Integrate iFIX with Relational Databases

Find out how iFIX can interoperate with relational databases for both read and write transactions.

Use iFIX Database Blocks with RDBs

Build the necessary infrastructure to communicate to RDBs at real-time via database blocks and services

Afternoon:

Use the Workspace to access RDBs

Combine programmatic and graphical methods within the Workspace to interact with RDBs

Use VisiconX with RDBs

Build interactive displays to access RDBs using simple, graphical, wizard-based controls.

iFIX Alarm Archiving

Explore the different methods of archiving alarms to external systems for further analysis: Alarm ODBC as well as OPCAE server via Proficy Historian.

Day 3

Morning:

Deploying ActiveX in iFIX

Create interactive user controls in displays.

Mastering Charts and Chart Groups

Extend trending functionality with extra developer know-how.

Dynamo Creation and Maintenance

Build easily maintained symbol libraries. Explore how to use them to maximize functionality while minimizing maintenance effort.

Afternoon:

Schedules

Build schedule to automate routine tasks.

Elementary Reporting

Discover how to extend iFIX to meet your reporting needs.

Enhanced Fail over

Walkthrough an orientation to the iFIX Enhanced Failover features and create high availability SCADA systems.

