HMI/SCADA iFIX Fundamentals

Instructor-led

Topics
- Understand communication between iFIX SCADA Servers and iClient nodes.
- Configure iFIX nodes using the System Configuration Utility.
- Configure I/O Drivers & OPC Servers to communicate with iFIX.
- Create and modify Process Database tags.
- Create graphic screens (pictures) using a wide variety of object types and animations.
- Design and build a picture navigation strategy.
- Create basic scripts using Visual Basic for Applications (VBA).
- Configure alarming and create screens to monitor and acknowledge alarms.
- Use trending to monitor both real-time and historical data.
- Design a system-wide security strategy.
- Use a variety of iFIX Utilities and OS tools to troubleshoot project or system process faults.

Course description
The iFIX Fundamentals course is designed to provide a good working knowledge of iFIX. All major features are covered, from project configuration to data acquisition and visualization. Valuable hands-on lab exercises are provided to guide students through the building and modification of an HMI/SCADA application from top to bottom.

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 an iFIX system.

Are there any pre-requisites?
Participants should have a working knowledge of Windows operating systems. Control system exposure and experience is recommended.

Duration
32 hours

Delivery
Instructor-led, classroom, virtual or onsite

Part #
44A728312-154

Suggested class size
10 Students

Course Schedule
Click here for the latest details and schedule.
**GE Digital**

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**Session 1**
Introduction to iFIX
Study the basic features and architecture of iFIX.

**Session 2**
System Configuration Utility
Configure an iFIX node, including networking, tasks, and alarm services.

**Session 3**
I/O Drivers
Install, configure, and monitor I/O Drivers, especially v7 OPC Servers.

**Session 4**
Introduction to the Workspace
Begin with orientation to the iFIX Workspace, picture documents and development tools.

**Session 5**
Graphic Objects
Begin building displays using links, shapes, dynamos and other graphic tools.

**Session 6**
Data-Entry and Control
Create user interactive controls in displays.

**Session 7**
Trending
Create pictures to monitor real-time and historical data.

**Session 8**
Security
Design and implement a security strategy.

**Digital Database Tags**
Use the Database Manager to create Digital Input and Digital Output tags.

**Introduction to the Database Manager**
Use the Database Manager to rapidly build a Process Database.

**Session 3**
Digital Database Tags
Use the Database Manager to create Digital Input and Analog Output tags.

**Session 4**
Scripting with VBA
Using Visual Basic for Applications to extend picture functionality.
View Displays and Forms in both the Client and Vision.
Archiving Data
Archive process data using an Historian.

**Session 5**
Animations
Create visual cues and enrich information delivery by linking objects to real-time data.

**Session 6**
Archiving Data
Archive process data using an Historian.

**Session 7**
Tag Groups
Using Tag groups for optimized development.

**Session 8**
Alarming
Build displays to monitor alarm information.

**Session 9**
Trending
Create pictures to monitor real-time and historical data.

**Tag Groups**
Using Tag groups for optimized development.

**Alarming**
Build displays to monitor alarm information.

**Session 10**
Security
Design and implement a security strategy.

**Troubleshooting**
Use iFIX and Operating System utilities to troubleshoot application elements.

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