

DIGITAL PROFICY IFIX FUNDAMENTALS

Instructor-led Training

Topics

- Configure and launch iFIX projects.
- Define basic configurations with the SCU.
- Build and troubleshoot I/O Driver configurations.
- Add, delete and modify tags using both thick and thin client tools.
- Create Graphics, Animations and Control within the Workspace.
- Write and configure scripts with VBA in the Workspace Visual Basic Editor (VBE).
- Understand and implement Global objects.
- Create and maintain display navigation schemes in Reusable displays.
- Manage and display process alarms and events.
- Archive and trend historical data.
- Deploy a system-wide security scheme.

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. An experienced instructor is provided to guide the student using demonstrations.

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.

Time Commitment

32 hours

Delivery

Instructor-led (distance-learning or classroom)

Part

44A728312-154

Level

Fundamentals

Course Schedule

Click [here](#) for the latest details.





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About GE Vernova

Building on over 130 years of experience and proven innovation, GE Vernova brings together and harnesses the collective power of GE's portfolio of energy businesses including Power, Wind, Electrification and Digital to focus on electrifying the world while simultaneously working to decarbonize it.

With focus, GE Vernova is accelerating the path to more reliable, affordable, and sustainable energy, while helping our customers power economies and deliver the electricity that is vital to health, safety, security, and improved quality of life.

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About GE Vernova's Digital Business

GE Vernova's Digital business is putting data to work to accelerate a new era of energy. We deliver the platforms and intelligent applications necessary to accelerate electrification and decarbonization across the energy ecosystem – from how power is created, how it is orchestrated, to how it is consumed. More than 20,000 customers around the globe use our software to help plan, predict, manage, and optimize operations today for a sustainable tomorrow.

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Session 1

Introduction to iFIX

Study the basic features of iFIX. Discuss topics in HMI development and application development steps.

Architecture and Applications

Explore the system architecture and key applications. Create a simple display and associated database blocks .

Communications

Explain the different types of I/O Drivers and OPC Servers. Discuss the basics of I/O Driver configuration, and the IGS Driver. Learn to install I/O Drivers and OPC Servers

Alarms

Create Alarm Areas and common formats. Enable Alarm Services. Understand Alarm Shelving.

Session 2

Process Database Thick Client Configuration

Compare primary and secondary database tags. Describe used tag types. Discuss the Database Manager. Utilize Database Manager tools. Learn to configure Alarm Shelving Policies. Work with Analog Tags. Describe the Analog Alarm (AA) tag. Define Register tags.

Process Database Thin Client Configuration

Describe Configuration Hub for Database Configuration. Understand Asset Model concepts. Describe the Digital Input (DI) tag and Digital Output (DO) tag. Explain the function of the Digital Alarm (DA) tag.

Pictures and Templates

Use the Workspace to build iFIX HMI pictures. Use the Create Picture Wizard to develop picture templates. Configure Workspace User Preferences.

Introduction to Workspace

Describe to the tools in the Workspace. Discuss graphic objects and properties. Build displays.

Session 3

Graphic Objects

Define Objects and Properties. Use the Property Window. Add Datalinks to displays. Explore the Expression Builder. Discuss Tag Status and Quick Trends.

Data Entry and Control

Describe Datalink Data Entry methods. Explore the Data Entry Expert. Use the Open, Close and Toggle Digital Point Experts. Use the Key Macro Editor.

Global Objects

Define Global Objects. Use Global Variables and Global Procedures. Create Global Tables.

Animations

Define Graphic Experts. Explore the Basic and Advanced Animation Dialog Boxes. Configure Animations and Global Threshold tables. Classify the four types of Animation Object.

Session 4

Introduction to VBA

Define VBA and identify where VBA is used in iFIX. Utilize the Visual Basic Editor. Use VBA scripting in iFIX.

Navigation

Define concepts of Navigation. List tools for building iFIX HMI Navigation. Configure a picture Navigation system Global Tables. Use Global Procedures.

Monitoring Alarms

Learn about Alarm severity and Alarm messages. Deploy the Alarm Summary Object. Use Alarm Counters.

Reusable Displays

Create Reusable Displays. Understand Model Substitution. Discuss Tag Groups.

Session 5

Historical Collection

Understand Historian iFIX Collection. Start the and configure the Historian iFIX Collector. Add iFIX tags to Historian, and monitor Collected data.

Historical Displays

View Historical data with the Line Multiline Chart Object. Manipulate Display Time settings. Use Workspace as a Historical HMI.

Security

Describe Layers of iFIX Security. Understand Basic iFIX Security. Secure Applications, Tags & Pictures. • Understand the concepts of Proficy Authentication (UAA).

iFIX Thin Client Access

Investigate Config Hub, Webspace and WebHMI. Discuss Remote Desktop.