

# iFIX 2023 from GE Digital

Improve productivity and process control with new generation iFIX featuring native HTML5 and MQTT



## Modern, industrial-strength HMI/SCADA for connected workers

With just a glance, operators should be able to recognize which information requires their attention and what action needs to be taken. They need to know quickly what problems have arisen and how they can be addressed efficiently. You can enable connected workers with proven and innovative iFIX HMI/SCADA. Used by thousands of industrial organizations around the world, iFIX is part of the Proficy family from GE Digital and delivers faster time to insight and greater efficiency for your operations while speeding time-to-value for system integrators.

Explore our new generation iFIX 2023 featuring centralized project configuration and deployment, enhanced failover, MQTT, native HTML5 with Proficy Operations Hub., and much more

With capabilities beyond your traditional HMI, native HTML5 means less installation and maintenance effort, easier mobility, responsive design, added value with modern web functionality, secure by design, and rich information where and when you need it – on the device of your choice, in the control room or out in the field.

### Outcomes

- Reduce development and deployment time and costs with native HTML5, Object Orientation and a unified configuration environment – including the ability to automatically create iFIX and Proficy Historian tags
- Speed operator response with modern screens, centralized visualization and ISA 18.2 alarm management
- Reduce troubleshooting time with higher situational awareness, using High Performance HMI layouts and context-driven navigation based on a model structure
- Improve output for OEMs, system Integrators and end users with flexibility and extensibility – easy-to-create, repeatable projects
- Minimize maintenance time and costs with Web-based configuration
- Provide real-time data feeds to your supply chain through secure-by-design, standards-based communications
- Ensure highest reliable uptime with native SCADA redundancy

## 01 Speed development with native HTML5, Object Orientation & centralized configuration

iFIX's Object Orientation in a centralized Web-based configuration environment allows users to quickly connect to structured data sources like PLCs; browse the PLC asset hierarchy as well as other IGS and OPC UA data sources; create objects, model templates such as tanks and pumps, instances of objects, and PDB tags; use a modern Web-based structured database manager; and visualize iFIX pictures and graphical objects in model context. You can significantly reduce configuration by automatically creating tags in iFIX and Proficy Historian.

Access and manage the data from all of your iFIX nodes across your network from a single Web browser instance, using secure-by-design digital certificates and ensuring trust between the Web client and SCADA servers. Multiple HMI/SCADA developers can work simultaneously on the same project from a Web browser anywhere on the network. Audit logs and visualization clues track changes to help ensure compliance to your highest corporate standards.

## 02 Leverage templates for process industries and High Performance out of the box

To help engineers quickly create the right user experience, iFIX provides modern sample systems (Water/Wastewater, Food & Beverage, Pharmaceuticals, Chemicals, Power) as well as predefined objects and templates designed using High Performance HMI concepts. Take advantage of rich, ISA standards-based capabilities such as High Performance Dynamos, alarm shelving, and model-based visualization that decrease development time and costs while improving operator response for higher uptime and quality.

## 03 Achieve visualization where you need it, anywhere, any time

Thanks to our wide range of HTML5-compatible clients such as Proficy WebSpace and Proficy Operations Hub, iFIX screens can be used to deliver information anywhere, any time, on a desktop, tablet, or smartphone – regardless of the form factor.



Designed for today's connected worker, iFIX 2023 improves operator decision making and speeds the right response.

## 04 Reduce risk with secure-by-design technology and best practices

iFIX leverages open and secure standards such as OPC UA, digital certificates, and Web tokens, which means you can deploy with confidence. Based on GE Digital's Red Team Penetration testing, iFIX further reduces security risks with ACL permissions on files, shared memory and registry settings; awareness of install updates when upgrading through automatic prompts; and many other security-related capabilities. Additionally, rely on GE Digital's iFIX Secure Deployment Guide for best practice recommendations.

*"What we like about iFIX is that there is a large user base, and we feel very confident that it's a product that will be around for a long time. We enjoy GE's commitment to the product and all their improvements."*

**Nicholas Buono, IT Manager, Southeast Morris County Municipal Utilities Authority**



# iFIX 2023 from GE Digital

Flexible, configurable, and secure-by-design, iFIX is powerful, industrial-strength SCADA

## Features

### New in Version 2023

#### Empower the Connected Worker

- Native HTML5 HMI provides a single experience for processing and interacting with Operations, driving transparency of information and better decision-making, efficient actions, and faster on-job training
- Native HTML5 graphics designer and lightweight scalable Runtime for a better, faster way to develop
- Easily combine iFIX, other OT systems plus IT systems with Proficy Operations Hub, adding information such as PDFs, videos, SQL tables, work orders, etc. for a richer operator experience

#### Ease & Speed: Centralized Configuration/Management

- Common model, common security reduces configuration – SCADA, historian and visualization
- Project encapsulation and central deployment
- Project component deployment

#### Flexible Deployment

- Geo-separated failover capability including cloud backup; TCP/IP failover enables failover across networks/sites, supports architectural flexibility and eases disaster recovery
- MQTT5 client: MQTT to OPC UA translator normalizes OT data connectivity; brings data from smart IoT sensors/devices into SCADA and subscribes to MQTT message bus data

### iFIX HMI/SCADA: Industry-Leading Innovation Used by Thousands of Organizations Around the World

- Open and flexible client / server HMI/SCADA that provides machine-level and supervisory control of process equipment
- High-speed scanning, alarm and control with modern, ISA 101 High Performance visualization
- Reduced hardware costs, centralize operations and facilitate remote access through cloud infrastructure (Azure VM, AWS VM and hybrid cloud)
- Provides operators with the right information at the right time to keep plants running with high efficiency
- Complete library of visualization tools to support any situation, applied in dozens of industries
- Variety of client options, native thick and thin
- Available options for high availability, alarm notification, and CFR 21 Part 11 support (eSig)
- Scalable – flexible sizing to unlimited points / tags, enterprise visibility & highly distributed architectures
- OPC UA server included along with native OPC UA client driver (optional)
- Leverage over 70 basic drivers with our Industrial Gateway Server (IGS) option
- [Proficy Operations Hub](#) integration: publish model and mimics from iFIX, build new Web-based mimics by browsing data
- Object orientation: native modelling in iFIX
- Simplified authentication management and improved security including SSO and nested AD groups
- Central Web-based configuration: unified Proficy development environment to configure your iFIX node
- Web DBM: Web-based database manager, modern look and feel, improves productivity
- High Performance HMI featuring dozens of pre-wired Dynamo libraries to jump start development. Also includes Water, Food & Beverage, Pharmaceuticals, Chemicals, and Power packaged examples
- Native high availability option to reduce downtime through SCADA Synchronization
- Improved single server scale: 64,000 tags per data type
- ISA 18.2 alarm shelving
- iFIX for IOT (embedded)
- Local, remote over LAN, WAN, or Internet, including VPN
- Encrypted communication from your Web client using SSL / digital certificate, IT security friendly, cloud ready
- Learn about fully [integrated optional solutions](#) such as:
  - [Proficy Historian Essentials](#), permanent storage of time-series data generated by your SCADA system
  - [WIN-911 Essentials](#), industry-leading alarm notification
  - [Proficy WebSpace](#), native iFIX experience in a browser
  - [iFIX Productivity Tools](#), free with iFIX Standard and Plus

## iFIX's Object Orientation

### Connect

Structured data sources like PLCs

### Browse

Asset hierarchy in PLC

### Create

Objects, model templates, instances of objects and PDB tags

### Use

A modern, web-based Database Manager

### Visualize

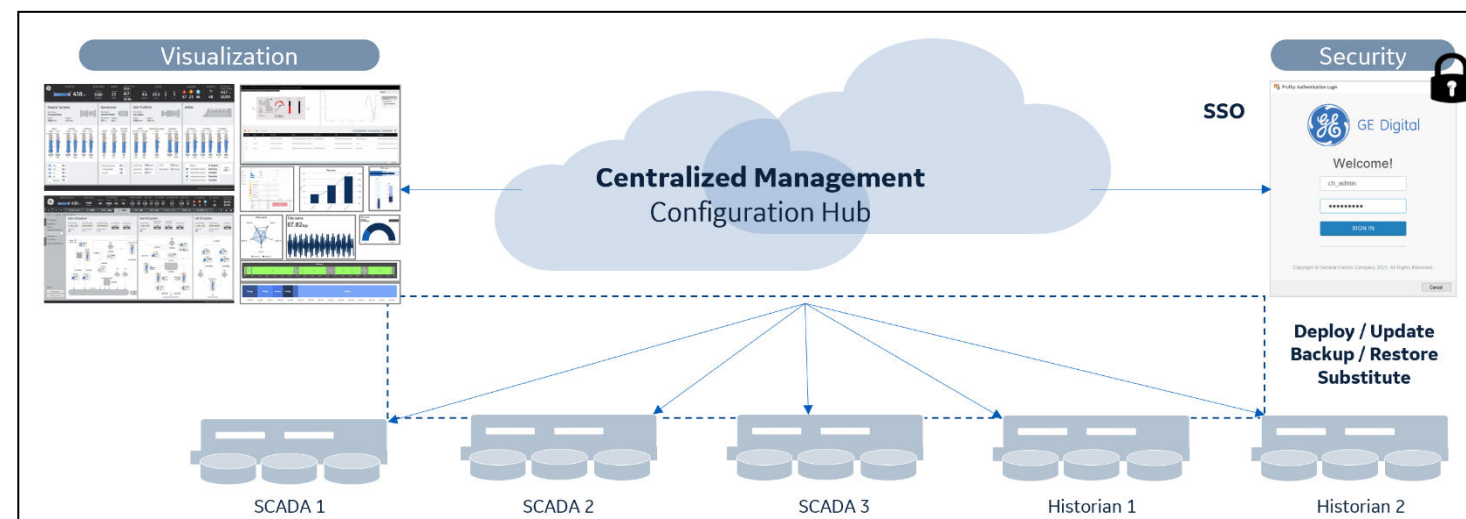
iFIX pictures and graphical objects like alarm grids in model context

### Continue

to view / use all previously built iFIX application components as is or with model

For Hardware and Software Requirements information, please consult the online [product documentation](#).

iFIX features centralized configuration, management and deployment to save you time and reduce costs.



Today's SCADA is not just monitoring & visualization with alarms rolling in. iFIX optimizes operations for active decision support and accelerates configuration.

GET FREE TRIAL

LEARN MORE



# iFIX 2023 from GE Digital



Increase operational productivity by enabling High Performance, model-based visualization

## Services

In the world of Industrial Internet of Things (IIoT), organizations are able to optimize productivity, reduce costs, and achieve Operational Excellence. While this is an exciting time for opportunity and growth, it can also bring on new challenges, questions, and uncertainty. No matter where you are on your IIoT journey, GE Digital has the right services offering for you.

**Advisory Services** We can help you plan and start your IIoT journey in a way that aligns to your specific business outcomes.

**Managed Services** We can help you maintain your critical machines from one of our remote locations around the world using model-based predictive analytic technology.

**Implementation Services** Our experienced global Automation partners can implement a collaborative, multi-generational program that marries your existing investments to the right enhancements and technology.

**Education Services** We specialize in education services to ensure that you're leveraging our solutions to the fullest extent with our training and certificate programs.

**Acceleration Plans** Let us help by ensuring that your business continues to operate at its highest efficiency, all while mitigating risks to your investments.

## Unified and Integrated Proficy Products for Your Digital Transformation Journey

GE Digital's unified and integrated Proficy suite helps you precisely monitor, control, and visualize every aspect of your operations, enabling operators to make the best decisions faster. Transforming your business requires foundational innovations that lay the groundwork for future success.



### [Proficy Operations Hub](#)

A centralized environment for aggregating and visualizing contextual and situational information for industrial applications – supporting rapid application development and rich displays for faster operational response and better decision making.



### [Proficy Batch Execution](#)

With Batch Execution, gain the security, flexibility, and ease of use you need to reduce costs, increase quality, and boost profitability.



### [Proficy Historian](#)

Optimize asset and plant performance through time-series and A&E industrial data collection and aggregation. Improve decision-making with advanced trend analysis.



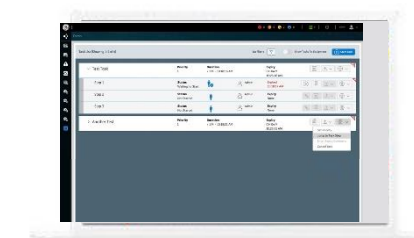
### [Proficy CSense](#)

Optimize with 5-in-1 industrial analytics capabilities in a closed-loop solution, allowing process engineers to analyze, monitor, predict, simulate, and optimize and control setpoints in real time.



### [Proficy Plant Applications](#)

Maximize overall equipment effectiveness (OEE), improve production scheduling, and ensure product quality by leveraging real-time production data.



### [Proficy Workflow](#)

Guide operators with dynamic, interactive electronic work instructions and eSOPs for more consistent operations and optimized processes.

#### About GE

GE (NYSE: GE) is the world's Digital Industrial Company, transforming industry with software-defined machines and solutions that are connected, responsive and predictive. GE is organized around a global exchange of knowledge, the "GE Store," through which each business shares and accesses the same technology, markets, structure and intellect. Each invention further fuels innovation and application across our industrial sectors. With people, services, technology and scale, GE delivers better outcomes for customers by speaking the language of industry.

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