GE Digital

iFIX 6.1 from GE Digital Configuration Guide

HOW TO CHOOSE THE RIGHT CONFIGURATION FOR THE JOB

IFIX 6.1 FROM GE DIGITAL - CONFIGURATION GUIDE

Introduction

iFIX is a proven, innovative flagship HMI/SCADA software product from GE Digital. iFIX can boost equipment uptime and product quality by improving operator reaction time through rapid problem identification, preventing operator mistakes, and providing intelligent warning.

Used in dozens of diverse industries ranging from water / wastewater to life sciences, and food & beverage / consumer goods to specialty chemicals, iFIX:

• Is an open and flexible client / server application that provides supervisory control of process equipment

• Provides high speed scanning, alarm and control

• Offers a complete library of visualization tools to support any situation

• Supports enterprise scale and highly distributed architectures

• Provides the operator with the right information at the right time to help keep the plant running in a highly efficient manner.
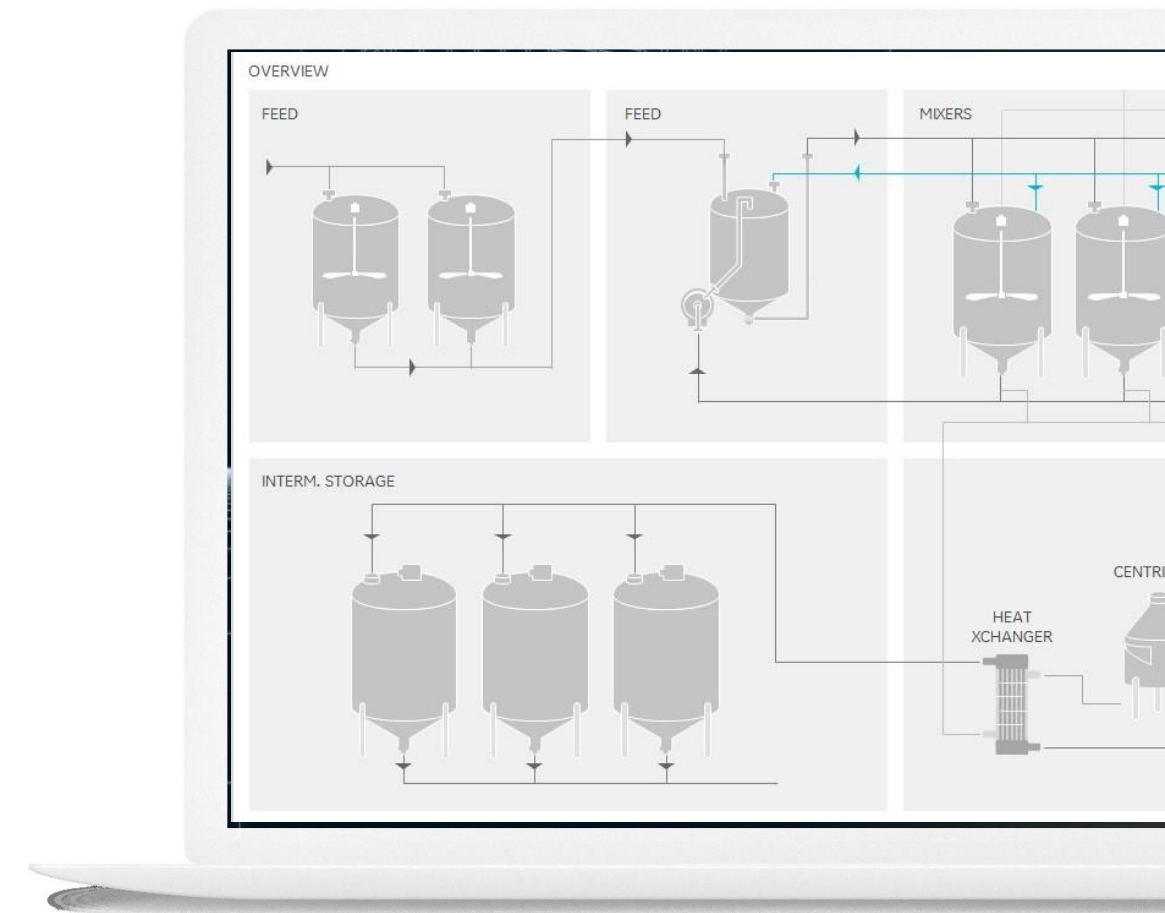
What is new?

iFIX 6.1 is an update that continues the journey of open standards, rapid application development, and enterprise support.

The specific features for the iFIX 6.1 release include:

• OPC UA client driver option

• Web Configuration Hub

• iFIX Embedded is now iFIX for IOT

• New Client Configurations

• Update to the High-Performance Dynamos to include Smart Alarm Limits

• Auto log-in (single sign-on) for Windows Users

• Improved Proficy Historian Aliasing

• Support for Windows Server 2019

Please refer to the New Features topic in the iFIX IPI (Important Product Information) section of the iFIX Electronic Books for a full listing.
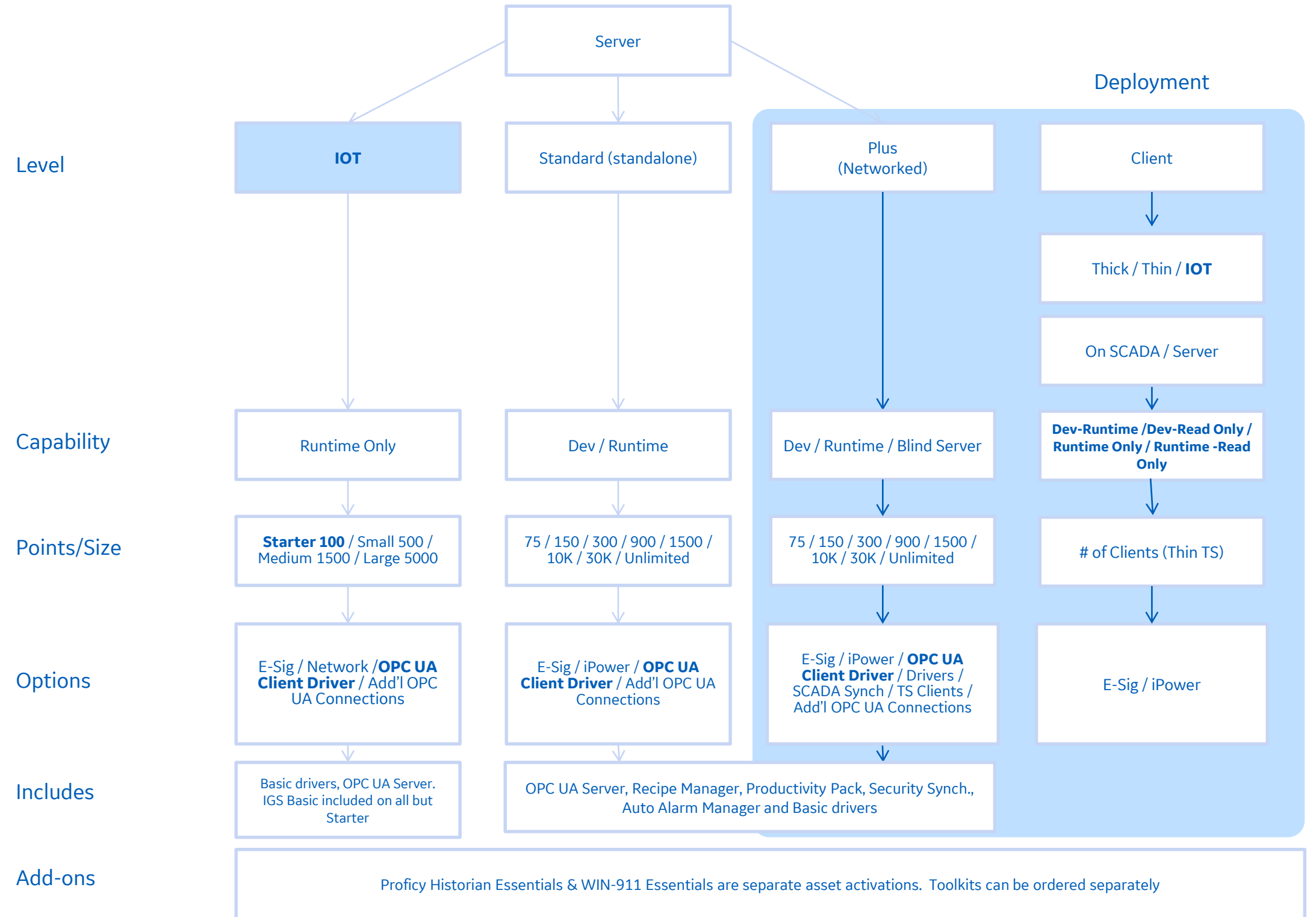
CONFIGURING THE HMI/SCADA IFIX SERVER NODE

iFIX servers come in three different versions:

- iFIX for IOT (formerly iFIX Embedded)
- iFIX Standard: a standalone version, no network
- iFIX Plus: networked version

For each server, then pick the core capability: development, runtime, read only, blind server.

Then select the number of points you need. Servers are scalable, from 75 I/O points up to unlimited.

		Server			Deployment
Level	**IOT**	Standard (standalone)	Plus (Networked)	Client	
				Thick / Thin / **IOT**	
				On SCADA / Server	
Capability	Runtime Only	Dev / Runtime	Dev / Runtime / Blind Server	**Dev-Runtime /Dev-Read Only / Runtime Only / Runtime -Read Only**	
Points/Size	**Starter 100** / Small 500 / Medium 1500 / Large 5000	75 / 150 / 300 / 900 / 1500 / 10K / 30K / Unlimited	75 / 150 / 300 / 900 / 1500 / 10K / 30K / Unlimited	# of Clients (Thin TS)	
Options	E-Sig / Network /**OPC UA Client Driver** / Add'l OPC UA Connections	E-Sig / iPower / **OPC UA Client Driver** / Add'l OPC UA Connections	E-Sig / iPower / **OPC UA Client Driver** / Drivers / SCADA Synch / TS Clients / Add'l OPC UA Connections	E-Sig / iPower	
Includes	Basic drivers, OPC UA Server. IGS Basic included on all but Starter	OPC UA Server, Recipe Manager, Productivity Pack, Security Synch., Auto Alarm Manager and Basic drivers			
Add-ons	Proficy Historian Essentials & WIN-911 Essentials are separate asset activations. Toolkits can be ordered separately				

Bold Text above is new functionality in iFIX 6.1

IFIX PRODUCT FEATURES BY SERVER TYPE

Features	Description	iFIX for IOT	iFIX Standard	iFIX Plus
Standard Database Blocks	This includes the following Blocks: AA, AI,AO,AR,BL,CA,DA,DC,DI,DO,DR,ETR, EV,FN,MDI,PG,SS,TM,TR,TT,TX	X	X	X
Control Database Blocks	Includes the following Blocks: BB, DT, LL, PID, RB, RM	X	X	X
SQL Database Blocks	Includes the following Blocks: SQD, SQT	Added with N/W	NA	X
SPC Database Blocks	Includes the following Blocks: SC, SD, HS, PA	X	X	X
Graphics	User Interface with Dynamos, Objects, Data Links, Animations	X	X	X
Classic History	Default iFIX Historical Package	X	X	X
Historian Essentials	2500 points / 200-day Buffer + a number of permanent Historian tags depending on server size	2500 pt / 200 day	2500 pt / 200 day	2500 pt / 200 day
Basic Drivers	Number of Drivers that can be run from a Single SCADA Node	IGS Only	X	X
Networking	This is iFIX Networking. Connecting one iFIX Node to another.	Option	NA	X
Recipe Builder	This feature allows Users to define Recipes (for ex. Table of Setpoints for Batch Upload or Download), for Batch applications	X	X	X
AB Productivity Pack	Pre-built Database Blocks and Graphic Faceplates and Dynamos for PID, Timer and Counter for AB PLCs	X	X	X
Security Synchronizer	Allows Users to synchronize iFIX Security with Microsoft Windows Security	NA	X	X
High Availability	Allows iFIX to run on Stratus Servers	NA	X	X
Auto Alarm Manager	This feature allows Reporting of Alarms from a Remote SCADA Node into the Alarm History of Central SCADA Node	NA	NA	X
SCADA Synchronization	Failover options between two SCADAs that synchronizes the Tag Database and Alarms	NA	NA	Option
Electronic Signatures	21 CFR Part 11 Compliance Feature. Allows users to Track Changes and maintains Audit Trail	NA	Option	Option
iPower	Power T&D application with special graphical tools to build a Power Grid HMI	Option	Option	Option
iFIX Toolkits	API extensions for custom interfaces into iFIX	NA	Option	Option
IGS Basic	IGS driver that allows access to basic device protocols	X	Option	Option
DNP3	DNP3 driver		Option	Option
ROC	ROC RTU driver		Option	Option
61850	IEC 61850 Driver		Option	Option
BacNET	BacNET Driver		Option	Option
LNS	Lonworks Driver		Option	Option
Win911	Win911 V3.1 Essentials Add-on (basic alarm escalation capabilities)		X	X

CONFIGURING THE HMI/SCADA IFIX OPTIONS

On-node Clients

On-node iClient TS clients are limited to 10 per node by default. Would you require additional Thick Clients or more than 10 Thin-Terminal Services Clients, contact your local sales representative. You can include up to 253 Thin-Terminal Services Clients on the same node (two are included by default). Also, for Thin-Terminal Services Clients, while Electronic Signature is priced per Server, iPower is priced per Client.

Additional OPC UA Connections

Maximum allowed per node is 10; two are included.

SCADA Synchronization

This option is for your High Availability SCADA Solution, on both the Primary (Standard License) and the Backup (Backup License) Node.

Electronic Signature and iPower

Pricing for these options will be a percentage of the iFIX configuration.

WIN-911 Add-on

WIN-911 is an alarm notification package for iFIX. It is the most widely used alarm notification platform in Industry and IIoT, deployed at over 10,000 facilities, in 70 countries and on six continents.

You will receive separate activation codes for these assets, allowing for this to be deployed on different nodes from the iFIX node, or it can be installed on the same node.

The WIN-911 Add-on option is available free of charge: WIN-911 Essentials edition is included in your order if you ask when placing the order.

The Premier and Enterprise levels are available for order as a paid option.

For a High Availability SCADA Solution, the WIN-911 Add-on is only required on the Primary Node.

Note that WIN-911 needs to be installed on an iFIX node, which can be a read client node, and will not operate independently. Please refer to the respective product literature for more information.

Proficy Historian Add-on

Proficy Historian is software that collects industrial data at very high speed, stores it securely, distributes it and allows for fast retrieval & analysis. It is a foundational element of your Digital Transformation

You will receive separate activation codes for these assets, allowing for this to be deployed on different nodes from the iFIX node, or it can be installed on the same node.

The Proficy Historian add-on option is selected by default when ordering, providing you with a Proficy Historian Essentials license. When ordering a High Availability SCADA Solution, Proficy Historian Essentials with 1000 Points and a Redundant Collector must be ordered.

Note that the Proficy Historian and WIN-911 Add-ons options are not available for demo (expiring) licenses.

iCLIENTS: WHAT'S NEW IN iFIX 6.1?

The read-only version is now broken into two separate licenses: Runtime or Development

We have added an IOT Thick Runtime Only iClient.

Previous	New with 6.1 and for all versions	Thick iClient	IOT Thick	Thin
Development	Development/Runtime	√	N/A	√
Runtime	Runtime Only	√	√	√
Read Only	Runtime/Read Only	√	N/A	√
	Development/Read Only	√	N/A	√

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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