Proficy iFIX 6.5

Important Product Information

We want to hear from you. If you have any comments, questions, or suggestions about our documentation, send them to the following email address:

doc@ge.com

Table of Contents

Important Product Information for iFIX 6.5

Refer to the following sections for key information on using iFIX:

What's New in iFIX 6.5

Welcome to the newest version of iFIX! The features of iFIX 6.5 include:

Service Pack 1

IMPORTANT: When upgrading iFIX 6.5 to SP1, be aware that you may need to clear your browser cache and restart the browser before you can use Configuration Hub after the upgrade.

This Service Pack addresses an issue where Configuration Hub did not function when iFIX SCADA is running from a custom project path. Before launching Configuration Hub web page, follow the below steps to create the custom project:

1. Create the project path and let the SCU populate it with the default files (via the prompt in the SCU).
2. Copy the entire iFIX_OpcuaConfigService folder located under the LOCAL folder of iFIX install path to the new project path's LOCAL folder.
3. Copy the ifix_config_service.JSON file located under the LOCAL folder of iFIX install path to the new project path's LOCAL folder.
4. Start iFIX from project path and enable security for the new project. It is off by default in the Security Configuration application.
5. Run the iFixconfigHubSettingsUtility.exe tool to set the IGS user name/password, and update any service ports that may have been changed in the original install/base path configuration. If IGS is running with its default security settings, then the user name is Administrator and there is no password. However, it is recommended that the default user name and password be changed in the IGS configuration and matches in the the iFixconfigHubSettingsUtility.exe tool.

    - This step allows the IGS browse to work.
6. Run the iFixUaServerConfigTool.exe tool and generate a new self-signed certificate under the new project location. These changes require a restart of iFIX node.
    - This allows the iFIX OPC UA server and OPC UA client (OUA) driver to run (if licensed). It also allows the Connections tab of Configuration Hub to work with OPC UA servers.
7. Run the iFixConfigServiceCertTool.exe from iFIX install path to make sure all the REST services and their certificate bindings look healthy.
8. Finally, perform any other configurations required for the new project (all settings for new projects are set to defaults). After this step iFIX and Configuation Hub web page can be used.

Configuration Hub

iFIX 6.5 includes a new web-based application, Configuration Hub, that allows iFIX 6.5 users to configure their HMI/SCADA projects from a web page. The iFIX 6.5 version of Configuration Hub allows you to configure an iFIX Database, the IGS and OPC UA connectivity, and create a new iFIX Model through the web browser-based interface. The Model export is compatible and can be imported into Operations Hub.

The Configuration Hub tool replaces the OPC UA Client driver tool available in iFIX 6.1, providing not just connectivity to your OPC UA Server, but additional IGS, Database, and Model support.

Check out that long awaited capability to organize and create/modify your tag database using object-oriented model concepts, including: Types, Objects, Templates, and Substitutions.

Building on the iFIX 6.1 browse and create capabilities with OPC UA servers, we've added the ability to browse and create tags from the IGS driver as well! Additionally, both drivers now have the ability to create types from Object hierarchy in OPC UA and Tag groups in IGS.

A newly added API call allows you to directly set Picture symbol values as a more granular alternative to using Tag group files. The SetSymbolValues API call lets you set 1 or more symbol values from a script. This functionality will be encapsulated eventually into a command expert.

iFIX leverages the latest HMI/SCADA technologies that deliver faster time-to-insight and greater efficiency for operators, while providing rapid application development for system integrators.

Be aware that Configuration Hub supports only UTF-8 encoded files. The iFIX Database Manager uses ANSI encoding. Prior to importing files into Configuration Hub's Model or Database panel, ensure that the CSV file is in UTF-8 encoding. To do so, open the CSV file in the Windows Notepad editor and perform a SAVE AS with UTF-8 encoding selected, and then save file as a CSV. Likewise, if you want to import a file from Configuration Hub into iFIX Database Manager, save as ANSI encoding before importing the file into the Database Manager.

For more information, click the Help button from the Configuration Hub application. Or, open the Configuration Hub content from the GE Documentation web page.

Enhanced Security

In today's cyber security aware world, we have built up iFIX's defenses with the default option to install built in Windows Access Control Layer (ACL) security when you install iFIX 6.5. You can optionally choose to not set up securely for existing iFIX implementations until you have had a chance to qualify this setup.

Install Changes

At the end of the iFIX 6.5 install, you will be prompted to secure the Windows resources used by iFIX (such as the file folders and registry keys). This requires that you provide a Windows user group name (local or domain). IFIXUSERS is the default name for the Windows user group, if you do not specify. When the local machine name is provided as the domain, the install will attempt to add the current user to this Windows group. After the install, any other Windows users who need to use iFIX or operate iFIX on this computer must be added to this group as well.

Users who are part of the iFIX user group (IFIXUSERS by default) will be able to run and use iFIX. Any other Windows user who tries to start iFIX (and is not part of the iFIX secure user group) will receive the following message and be unable to start iFIX: "Windows cannot access the specified device, path, or file. You may not have the appropriate permissions to access the item."

If you enter a group name that resides on a trusted domain as your iFIX secure user group, the user group should have a Global or Universal Group Scope. If you want to run iFIX with users from multiple domains, you should add the selected users from the trusted domain to your iFIX secure user group.

There is a wizard, ConfigureWizard.exe, that can be run to change these settings after install. You can find this wizard in the iFIX install directory. For instance, if you choose not to install securely initially, you can use this wizard to change to secure mode in the future. The ConfigureWizard.exe cannot run while iFIX is running.

IMPORTANT: Do not to delete the user group that was created/used by the iFIX installer (to apply ACLs) before you uninstall the iFIX product. Instead, uninstall iFIX first, and then you can optionally remove this Windows group. If you accidentally delete this group, run the ConfigureWizard.exe tool which is found in the iFIX install folder (by default: C:\Program Files (x86)\GE\iFIX). Restart the machine and then restart iFIX. Confirm that you can open the iFIX WorkSpace and the Database Manager. After that, you will be able to uninstall iFIX if want to.

For the full install steps, refer to the "Installing the iFIX Software" topic in the Getting Started guide.

iFIX High Performance HMI Sample System

iFIX 6.5 includes a High Performance HMI Sample System. If you are a Systems Integrator or end customer, you can use this Sample System to jump start your own application development. If you a GE Digital Partner or System Integrator, you can use this Sample System to demonstration the capabilities of iFIX.

High Performance HMI is an ISA 101 standard where the HMI screens are simple and uncluttered, and immediately recognizable. This allows abnormal conditions to stand-out from normal operation, providing appropriate and timely information for the Operator to have confidence in the correct action to take.

Installing the Sample System will add the iFIX Sample System icon on your desktop, which will launch a custom SCU file. You can also launch the Sample System from the iFIX Start-up menu.

When configuring a new iFIX system with Configuration Hub, and you want to use the Sample System, make sure you start iFIX first before starting the Sample System.

All of the High Performance Dynamos created for the Sample System are installed by default in the Dynamo Sets folder, and you can use them in your own applications. As you explore these new visual elements, you will find that many Dynamos are pre-populated with tag and field references so that you'll

know how to update them with the appropriate fields. You can use actual tag and field names, or use tag group or model symbol references for picture replacement. The new Dynamo Sets include:

- Alarming
- L1_Buttons
- L1_Gauges
- L1_Pumps
- L1_Valves
- L2_Pumps
- L2_Valves
- MomentaryPB
- PBC_Reset_Button
- PBC_Review
- PBCAlarms
- PBCAlarmSetPointEntry
- PBCButtons
- PBCDataHolds
- PBCGauges
- PBCInstruments
- PBCToggles
- RMOW_GaugesX
- RMOW-HP
- Sparklines
- Waterloo

NOTE: You can run Sample System with an iFIX license by removing the /D switch from the Sample System shortcut. However, be aware that you need to have an appropriate license installed for the Sample System to be fully functional.

For more information, search for "Sample System" in the e-books.

IMPORTANT: There is no upgrade path if you installed the Sample System with iFIX 6.5. If you previously installed the Sample System from the 6.1 FBK, the 6.5 install will put the Sample System in its own directory in your iFIX folder. You'll need to manually move any custom elements that you may have created with the older Sample System after the install.

Upgraded Windows Support

iFIX 6.5 includes support for the following new Windows operating system:

- Microsoft® Windows® 10 IoT Enterprise Edition with LTSC enabled, or an operating system released under Long Term Service Channel for iFIX for IoT. Use of iFIX for IoT is further restricted by your End User License Agreement (EULA), please see your EULA for details.

iFIX 6.5 dropped support for:

- Microsoft® Windows® 7

For a complete list of all supported operating systems, refer to the System Requirements tab.

Updates to the Alarm Summary

The Alarm Summary has a new Filter named Model Context. Tag symbols may be used in the model context filter value. It also contains 2 new columns: Full Object Name and Object Name.

New Command Expert

The Set Symbol Values Expert was added in iFIX 6.5. At run time, the Set Symbol Values expert (SetValuesToSymbol) replaces a name with a corresponding value, against that name in the active picture document. Up to five symbols name value pairs can be specified in this expert.

Be aware that if you mix different symbols from tag group files and use SetValuesToSymbol VBA scripts in a picture, errors can appear if you try to load the TGD (tag group) file before the script-defined symbols have been set. As a workaround, either use VBA to set the symbols before the TGD is loaded, or include all symbols from the picture in the TGD file (so that they can later be changed by scripts).

Search the ebooks for "Set Symbol Values Expert" to learn more.

Updates to the Database Manager

The Database Manager Home tab contains a new button in the Process Database area: Create New. Use this button to create a new database. When you click Create New it opens the Save As dialog box. Provide a name your database when you create it, and then save it.

In iFIX 6.5, you can no longer load or edit the EMPTY.PDB database in the Database Manager. The EMPTY.PDB database is still used in the background as a template for new databases, but you just cannot actually open it and work on in it in the Database Manager. If you choose to reload the EMPTY.PDB database, in iFIX 6.5, you are forced to provide a new name and then that new database is loaded.

If you use scripts, EDA, or command line tools that load EMPTY.PDB, for the time being, you can still run these scripts. However, be aware that loading EMPTY.PDB can cause issues with the new iFIX web configuration in Configuration Hub.

Updates to the iFIX OPC UA Server

The iFIX tags represented in the iFIX OPC UA Server have been updated in iFIX 6.5. They have been reorganized, removing the individual ‘tag type’ folders and emphasizing the more commonly used fields. The Node ID format for tags has also changed, however the previous Node ID format is still supported. For more information, see the "OPC UA Server for iFIX" section of the ebooks.

Updates to FIXVBA

The iFIX Automation References includes the following method updates. These changes implement a better naming conventions for the specified methods. Old method references will continue to work unchanged.

- SetSymbolValues Subroutine: Sets the symbol substitutions for model context.
- BestFitWithCenter Property: When the global setting named ZoomToFitFromCenter is disabled in the FixUserPreferences.ini file, use BestFitWithCenter to override the global setting on a picture.

For more information, refer to the iFIX Automation Reference e-book.

Update Support for Third-party Applications

The following third party applications have been tested with iFIX 6.5:

- iFIX Productivity Tools from Catapult (included on the iFIX install media). Includes updates to support the latest version of iFIX. The Productivity Tools are supported in English only.
- Dream Report 5.0 R2 for Proficy.
- Win911 version 4.20.10.
- Industrial Gateway Server (IGS) 7.68. Includes support for all the latest driver fixes.

Support for Recently Updated GE Products

iFIX 6.5 includes support for the following recently updated GE products:

- Operations Hub 2.0.
- Historian 9.0.
- Plant Applications 8.2.

For a complete list of products and versions tested to work with the iFIX 6.5 product, go to the System Requirements tab and scroll to the Compatibility with Other GE Products section.

Release Notes for iFIX 6.5

The following release notes are available for iFIX 6.5:

If You Are a First-time User...

Run the Sample System or run iFIX in Demo Mode to Experiment with iFIX Projects First

If this is your first time using the iFIX product, try launching the Sample System from your desktop icon of the same name. There is a specific chapter in the help documentation, under the heading Sample System, which will instruct you on how to interact with the Sample System in run mode. When configuring a new iFIX system with Configuration Hub, and you want to use the Sample System, make sure you start iFIX first before starting the Sample System.

You can also run iFIX in Demo mode. In Demo mode, you can run iFIX applications for 2 hours. To start in Demo mode, start iFIX from command line using the parameter, like this:

Launch.exe /t

NOTE: You can run Sample System with an iFIX license by removing the /D switch from the Sample System shortcut. However, be aware that you need to have an appropriate license installed for the Sample System to be fully functional.

Where to Go First for More Information

Check out the Getting Started with iFIX guide first. The first few chapters of this guide contains detailed information about installing and upgrading iFIX, as well as supported configurations.

For a general overview of iFIX and the WorkSpace, refer to the Understanding iFIX electronic book.

For an overview of how to configure your iFIX system, refer to the Setting up the Environment electronic book.

Licensing on Microsoft Common Controls Installed with iFIX

iFIX installs Microsoft common controls as part of the iFIX installation. These controls are used internally by iFIX. You cannot use them directly unless you have installed a product that provides the license to these controls, such as Microsoft Visual C++ or Visual Basic or have an Microsoft Office product installed. Otherwise, you can download the appropriate distribution package from Microsoft's Knowledge Base.

Installation

Installing as an Administrator

You must install iFIX with a local Windows user account with administrator rights. See your Windows manuals or online Help for information on creating this account.

BACK TO TOP

Installing iFIX

Without an iFIX license, you can run iFIX applications for 2 hours in Demo mode.

NOTE: When configured for WebSpace, none of the iFIX SCUs on WebSpace Server should be configured to start iFIX as service, as this is a unsupported configuration.

To install the product:

1. Log in as a user with Administrator rights.
2. Shut down any GE applications or services that run on startup. For instance, if you have Historian Collectors configured to start when you start Windows, use the Services window to shut them down.
3. Follow the steps on your screen. For more detailed information on installing your iFIX product, see the "Installing the iFIX Software" section in the Getting Started with iFIX guide.
4. After the install completes install your license. For more information on installing and configuring your license, refer to the GE Digital Support site: https://ge-ip.force.com/communities/en_US/Article/GE-Intelligent-Platforms-Software-Product-Licensing.
5. Make sure that you restart your computer after you finish the install steps.

TIP: If you get a message that a necessary Windows security update for the Universal C Runtime component is missing on this computer, be sure to install the Microsoft Update, KB2999226, and then try installing iFIX again. To install KB2999226, you may need to install other updates first. Refer to the Microsoft web site for details. If you get any other Windows error when you try to install iFIX, perform a Windows Update and then try to install iFIX again.

IMPORTANT: Be aware that if you do not already have .NET 4.6.1 installed and you choose to install iFIX, the .NET 4.6.1 install will run first. After it installs, you will be prompted to restart your computer. After the restart, the iFIX install continues. The install media must be available or connected to the target machine the entire time for the install to finish.

Installing iFIX with Terminal Services Enabled

IMPORTANT: Be aware that all Terminal Server client users should be a member of the Remote Desktop Users group.

Upgrade Notes

Before You Upgrade or Reinstall...

Before you upgrade the iFIX product installed on your computer, make sure you shut down all GE applications. It is important that no GE products are running when you run the iFIX installation program.

IMPORTANT: Direct upgrades from iFIX 3.5 to the latest version of iFIX are not supported. To upgrade iFIX in this case, upgrade to 5.8 first and then upgrade to the latest version of iFIX.

NOTE: iFIX WebSpace must be uninstalled before/after the upgrade to iFIX 6.5. Instead of iFIX WebSpace, WebSpace 5.0 needs to be installed and configured to work with iFIX.

IMPORTANT: If you are upgrading from a previous version of iFIX with failover enabled, and you want to use the Enhanced Failover feature in iFIX 5.0 or greater, there are a number of issues that you must be aware of. For detailed information and steps describing how to upgrade your failover system, see the Enhanced Failover and Upgrading" section on the New Features tab.

Save copies of your existing .INI files with your application preferences and any custom files you create; customized files may be overwritten during an upgrade. As such, you may need to integrate your custom changes into the newer versions of these files after you upgrade.

Back up your existing iFIX projects. This includes the files in your LOCAL, Config Files Backup, PIC, and PDB folders.

It is also recommended that you create a backup copy of your Alarm ODBC configuration file(s).

Export a report of your system configuration (SCU), for reference. (In the SCU, on the File menu, click Report.)

Export a report of your security configuration, for reference. (In the Security Configuration application, on the File menu, click Export.)

If you have an application created by an Integration Toolkit, Database Dynamo Toolkit, or System Extension Toolkit from iFIX 2.5 or earlier, and you want to use this application with iFIX 6.5, do not uninstall iFIX. You must install iFIX 6.5 over your existing iFIX configuration. Your toolkit application will not run if you uninstall your previous version of iFIX.

Be sure to obtain any toolkit updates that you need, prior to installing iFIX.

CAUTION: If you choose to integrate Historian with iFIX, make sure that your database tags have unique names. If both your iFIX and Historian databases have the same tag name, when you import an iFIX tag into the Historian database, the Historian tag will be overwritten with the tag of the same name from the iFIX database. For more information, see Using iFIX with Historian and Troubleshooting Historian and iFIX.

Upgrade Steps

To upgrade to the latest version of iFIX, perform the following steps:

1. Confirm that you backed up all the applicable files. Refer to the Before You Upgrade or Reinstall... section above for more details.
2. Shut down any GE applications or Proficy services that are running. For instance, if you have Historian Collectors configured to start when you start Windows, use the Services window to shut them down.
3. Run the iFIX product install. A message box appears asking you if you want to upgrade your system.
4. Click Yes to continue.
5. Follow the instructions on your screen. For more information, use the steps in the Installing the iFIX Software topic in the Getting Started guide.

Standard Chart Upgrade Notes

Be aware that after an upgrade, if you have Standard Charts with Classic Historian data for data sources, that you may need to modify these data sources after an upgrade. When configured for use by pens in the Standard Chart, single quotes in Classic Historian data sources are not stripped out after an upgrade.

Pictures and the Upgrade

Prior to iFIX 6.5, when you opened a picture from a previous version of iFIX in the newer version, and saved it, your picture was automatically updated to the newest version of iFIX. Pictures created with iFIX 5.5 (or earlier) were created with a Logical Coordinate System, which uses logical units for screen measurements. The Logical Coordinate System allowed this automatic upgrading.

With iFIX 6.5, pictures are not automatically upgraded because this version uses the Enhanced Coordinate System for screen measurements. An expert is provided to easily upgrade pictures you select from the legacy Logical Coordinate System to the new Enhanced Coordinate System.

You can use both the Logical and Enhanced Coordinate Systems with iFIX. For example, you can edit a legacy picture before you upgrade it. By default, the Enhanced Coordinate System is enabled for new picture creation. For more information on this expert and on coordinate systems, refer to the Creating Pictures e-book

NOTE: Be aware that pictures with Enhanced Charts containing tag groups will display a message on upgrade. However, pictures with Historical datalinks and Historical animations with tag groups will not.

Due to the design of the VisiconX objects in iFIX 5.0 and greater, it is recommended that you manually replace your older VisiconX objects with the newer versions (if you are upgrading from a version of iFIX prior to iFIX 5.0).

The Database and the Upgrade

Be aware that when you upgrade to iFIX 6.5, the file size of your process database file will increase.

When you upgrade your database, the high and low engineering units (EGU) fields are converted from single precision to double precision floats. This means the degree of accuracy (the Epsilon value) changes from +/_0.00000012 to +/_0.00000000000000022. If you are using extreme ranges (very large or very low values) for your EGU limits, you may possibly experience issues after an upgrade. To resolve these issues, open the Database Manager, export your database and then re-import it. This procedure resets the block values.

DDA Drivers and the Upgrade

If you are using DDA drivers, such as ROC, BR3 or MBR, you must reinstall them after upgrade. If the driver installation files are unavailable, you can use a copy of your existing FIX.INI file to compare to the one created after the upgrade. Then, copy the missing lines from your old FIX.INI file to your new FIX.INI file.

Custom *.fxg Files and the Upgrade

Be aware that if you use custom .fxg files with iFIX and you choose to upgrade, you will need to re-register these .fxg files after the iFIX upgrade. For more information on how to re-register the WorkSpace, refer to the "Adding Files to the System Tree" topic in the Mastering iFIX e-book.

Restoring the Settings in the iFIX .INI Files

As you install iFIX, the product install program places a new version of the startup control file, FIX.INI, into your iFIX Local folder. The previous version of this file is copied to the Config Files Backup folder, along with the other configuration files.

If you configured Database Dynamos, also known as loadable blocks, or other custom programs to run as part of iFIX startup, you should compare the new FIX.INI file in the Local folder against the FIX.INI file stored in the Config Files Backup folder. If you find any changes between the two files, add the necessary lines to the FIX.INI stored in the Local path.

Additionally, you should restore other .INI files as necessary, using the same process.

Upgrading Database Dynamos

Database Dynamos, also known as loadable blocks, will require updates to work with iFIX 6.5. If you have old Database Dynamos on your system, the iFIX install program will detect them, and generate a warning message.

The GE Digital web site contains updated versions of the Database Dynamos supplied by GE Digital. To obtain updated version of other dynamos, contact the vendor of that dynamo. To obtain the current version of the Database Dynamo Toolkit, contact your local iFIX sales representative.

Upgrading Application Toolkit files

If you have an application created by an Integration Toolkit, Database Dynamo Toolkit, or System Extension Toolkit, and you want to use this application with iFIX 6.5, do not uninstall iFIX. You must install iFIX 6.5 over your existing iFIX configuration. After installing iFIX, rebuild your existing applications with the newest toolkit available to ensure compatibility with iFIX 6.5.

Supporting VBA 6.5 After an Upgrade

In VBA 6.5, certain event parameter data types are interpreted differently than in earlier VBA version. For instance, one of these data types is the VBA ErrObject. The VisiconX Data Control uses the ErrObject data type in two of its events.

If a picture created with an earlier version of iFIX contains a VisiconX Data Control, and also contains VBA 5.5 scripts added for the VisiconX Data Control's **ErrorOccurred** event or **ExecuteComplete** event, when the picture is opened in iFIX 6.5, it will generate a compiler error indicating an invalid character '_'.

This occurs because the ErrObject in VBA 5.5 is declared as type "VBA._ErrObject", and in VBA 6.5, it is declared simply as "ErrObject".

To correct the compiler problem and make the scripts function correctly, make the following changes to the event declarations:

iFIX 2.21 and earlier with VBA 5.5:

```
Private Sub vxData1_ErrorOccurred(pError As VBA._ErrObject)
End Sub
```

iFIX 6.5 with VBA 6.5:

```
Private Sub vxData1_ErrorOccurred(pError As ErrObject)
End Sub
```

iFIX 2.21 and earlier with VBA 5.5:

```
Private Sub vxData1_ExecuteComplete(pStatus As VBA._ErrObject, sQuery As String)
End Sub
```

iFIX 6.5 with VBA 6.35:

```
Private Sub vxData1_ExecuteComplete(pStatus As ErrObject, sQuery As String)
End Sub
```

NOTE: This problem may occur with other ActiveX controls and data types that GE has not directly encountered. If you see problems, you should insert the control into a new picture, go to the VBA Editor, and examine the syntax used to declare events for the control in the new picture. Use the information provided in this section to edit the event declarations in the existing picture.

Important Information for Windows Users

Accessing Remote OPC Servers in Windows

Before you can access remote OPC servers in iFIX, such as through the Discovery and Auto-Assembly Component (DAC) and the OPC Client driver, you must make sure that your firewall settings are correct, and that the DCOM settings for your operating system are correct. For detailed steps on how to do this, refer to the "Setting up for Remote OPC Server Access" chapter in the Getting Started with iFIX book.

Disabling Fast Startup in Microsoft Windows 8.1

In Windows 8.1, there is a functionality available in the Power Options called Fast startup (Power Options are accessible from the Settings > Control Panel). When Fast startup is enabled as a Power Option (the default) and you power down your computer or tablet, Windows will save the current state of the system. The next time you restart Windows, your previous state is restored. This is because, by default, Microsoft Windows 8 and 8.1 shuts down by logging off all users and then hibernating. In this case, any service that was running will continue to run on the next startup.

When iFIX is running as a service, you may want to avoid this "Fast Startup" functionality. To revert to the full shutdown on Windows 8.1, in the Power Options on the SCADA Server, select "Choose what the power buttons do." Select the Change settings that are currently unavailable option and then scroll down to the Shutdown Settings area, and clear the Turn on Fast startup option.

(The "Fast Startup" feature is not available on Microsoft Windows Server 2012.)

Troubleshooting iFIX Product Issues After the Install

My-T-Soft Window Display Issues

If you install the My-T-Soft on screen keyboard for use with iFIX and experience window display issues, such as the Minimize button being hidden off-screen, you can use the MYTSOFT.ini file to adjust the settings of the application.

For example, when you have the WorkSpace in Ribbon view (the default), the caption bar with the Minimize icon is displayed off screen. It's there, but you cannot view it. My-T-Soft allows you to customize where the Minimize button positions itself through the MYTSOFT.ini file located in the iFIX install folder. By changing the ButtonOffsetY=0 setting to a positive number, you can move the button down a specified number of pixels, allowing the Minimize button and caption bar to show in full screen, when in ribbon view. After this value is configured, the My-T-Soft keyboard will always display in that specified offset position.

iFIX Does Not Start After an Upgrade

Be aware that when you install iFIX over an existing version, the security privileges for the iFIX folder may allow Read and Execute permissions only. Limited permissions can cause various problems, such as the inability to open the STARTUP.LOG file or to write to the Alarm Area Database files.

To change the security permissions on this folder, follow these steps:

1. Open Windows Explorer by clicking the Start button, and pointing to Programs, Accessories, and then Windows Explorer.
2. Locate the folder to which you installed iFIX. (For example: C:\Program Files (x86)\Proficy\Proficy iFIX.
3. Right-click the iFIX folder and select Properties from the right-click menu. The Properties dialog box appears.
4. Click the Security tab.
5. Select the Users group in the top half of the dialog box.
6. Select the Allow check box for the Modify, Read and Execute, List Folder Contents, Read, and Write permissions in the bottom half of the dialog box.
7. Click OK.

Unsupported Items and Recommendations

Enhanced Failover and Legacy Clients

An iFIX network that contains iFIX version 5.9 Enhanced Failover SCADA nodes and also contains older iFIX client nodes may not be supported:

- An iFIX client node, installed with iFIX version 5.5 or later, is fully compatible with iFIX version 5.9 Enhanced Failover SCADA nodes.
- An iFIX client node, installed with iFIX version 5.1 and updated with the iFix51_Pulse10_Workspace_019 SIM (Software Improvement Module), is fully compatible with iFIX version 5.9 Enhanced Failover SCADA nodes.
- An iFIX client node, installed with iFIX version 5.1 and is not updated with the iFix51_Pulse10_Workspace_019 SIM is **not** compatible with iFIX version 5.9 Enhanced Failover SCADA nodes.
- An iFIX client node, installed with iFIX version 5.0 or earlier, is not compatible with iFIX version 5.9 Enhanced Failover SCADA nodes.

IMPORTANT: In an Enhanced Failover pair, both SCADA nodes must have the same iFIX version installed with all SIMs.

Microsoft Office Document References in the iFIX WorkSpace System Tree

You can no longer open new Microsoft Office documents (such as Microsoft Excel or Word 2013 or 2016) inside the iFIX WorkSpace. These documents will now launch separate in the associated Microsoft application, outside of the WorkSpace.

If you want to archive these Microsoft applications along with your project with Backup and Restore or Change Management, the Excel and Word documents must be saved to "App" sub-folder in the WorkSpace system tree.

Ribbon View and Unsupported Microsoft Windows Themes

High Contrast themes are not supported when running the iFIX WorkSpace in Ribbon view.

iFIX Screen Saver

The iFIX Screen Saver is not supported in iFIX 6.5.

UNC Paths and Install

Installing the product from UNC paths is not supported or recommended.

Running SCADA Nodes on Wireless Devices

It is strongly recommended that you do not run SCADA nodes on wireless devices. Running an iFIX SCADA on a wireless device may impact performance, as most available wireless protocols fall below the recommended bandwidth requirements.

Intel Itanium Processor

The Intel Itanium Processor is not supported for iFIX on 64-bit operating systems.

Alarm Viewer

The Alarm Viewer is no longer installed as part of iFIX. If you are upgrading from a previous version of iFIX, your pictures with Alarm Viewer objects will continue to work. At the time of this release, however, the Alarm Viewer is not supported on a Windows 64-bit enabled operating system.

Migration Tools are Removed from iFIX 6.5

Migration tools are not supported from iFIX 6.5 , if ODF files exist then user must use older versions of iFIX to upgrade screens.

FIX Desktop

iFIX no longer supports FIX Desktop.

Classic Historian

As of 6.1, iFIX no longer supports Classic Historian and it has been removed from the program. Updating to iFIX 6.5 (or later) from a previous version will remove the Classic Historian binaries. Before updating, make sure you have a plan to migrate your historical data to Historian Essentials, or some other permanent storage.

Migration Tools

iFIX 6.5 does not support the FIX32 migration tools. If an .ODF files exists, that you want to convert, you must use an older version of iFIX to upgrade screens first before opening the picture in iFIX 6.5.

Historian 4.5 and Earlier

Historian 4.5 and earlier are not supported.

BACK TO TOP

Historian for SCADA

Historian for SCADA version 4.5, 5.0, 5.5 are not supported with iFIX 6.5. Users with Historian for SCADA 4.5, 5.0, 5.5 will be required to upgrade to Historian Essentials.

Speedstep Technology

SpeedStep technology is not supported and must not be enabled.

BACK TO TOP

IPv6

FIX does not make use of any IPv6 functionality.

If you disable IPv6 to use WebSpace, make sure that your local HOSTS file does not contain any IPv6 references. For example, remove the "::1 localhost" lines from the HOSTS file, and replace them a line that references the IP address and the local host name (if necessary).

BACK TO TOP

Unsupported Windows Operating Systems

The following are no longer a supported operating system for iFIX:

- Microsoft Windows Server 2008 R2
- Microsoft Windows 2003
- Microsoft Windows XP
- Microsoft Windows XP Embedded
- Microsoft Windows 2000
- Microsoft Windows NT
- Microsoft Windows Vista

Drivers and Operating System Compatibility

Be sure to check with the vendor of your driver software to confirm that your driver supports the operating system you want to run it on.

DAC and Operating System Compatibility

Be sure to check with the vendor of your driver software to confirm that your driver supports the operating system you want to run it on. If your driver is not supported on the specified operating system, you may experience issues with the Discover and Auto Configure (DAC) tool since it interfaces with the driver.

OPC and Running as a Service and on Some Operating Systems

If you want to run the OPC Client driver as a service, iFIX must also run as a service. Likewise, if you want to run iFIX as a service, the OPC Client driver must run as a service. You cannot run one as a service, without the other also running as a service.

If you want to run the OPC Client driver on a specified operating system, be sure to check with the vendor of your OPC Server software to confirm that your OPC Server supports the operating system you want to run it on.

It is recommended that you install the latest OPC Core Components from the Downloads section of the OPC Foundation web site: http://www.opcfoundation.org. The latest OPC Core components are designed for use on a 64-bit OS.

Backwards Portability of Alarm ODBC Configuration

Once you open or create an Alarm ODBC configuration file in iFIX 6.5, you cannot open that file on a node running iFIX 2.6 or earlier. Opening the file on a node running iFIX 2.6 or earlier will cause unpredictable results. It is recommended that you create a backup copy of your Alarm ODBC configuration file before installing the latest iFIX version.

Backwards Portability of Process Databases

To ensure a secure signing environment, GE Digital strongly discourages editing an iFIX 6.5 process database on an older-version node. If you open a 6.1 database on an older-version node, such as 2.6, you cannot add or modify individual tags, although it is possible to modify the database, such as to delete and duplicate tags. Do not do this.

Backwards Compatibility of 5.9 Pictures

The iFIX 6.5 pictures are not backwards compatible in earlier versions of iFIX, such as iFIX 5.9, 5.8, 5.5, 5.1, 5.0, 4.5, 4.0, 3.5, 3.0, or 2.5. If you try to open an iFIX 6.5 picture in an earlier version of the iFIX WorkSpace, an error message appears stating that you need to upgrade your software to the newer release, and the file does not load. If you use multiple versions of iFIX, store your pictures locally or use a separate shared pictures path for each version of iFIX.

OPC Servers that Require an Access Path

The iFIX WorkSpace does not support OPC servers that require an Access Path, such as RSLinx. To use an OPC Server like RSLinx with iFIX, configure the server so that it does not require a value for the access path. In order to do this with RSLinx, use the following syntax: [topic]item.

Mission Control's Datascope Screen with 7.x Drivers

The Datascope screen in Mission Control does not work with version 7.x drivers. If you select a version 7.x driver in Mission Control, you cannot use the Datascope button.

Using the Virtual Keyboard to Enter Large Amounts of Data

The virtual keyboard is designed for password and data entry. Avoid using this virtual keyboard for entering large amounts of text in Windows, as unexpected behavior may result. Certain combinations of keystrokes may cause the virtual keyboard to display incorrect characters. The virtual keyboard should behave as expected if you restrict its use to entering passwords and other data entry.

Using iFIX Objects in Other Applications

iFIX ships with several objects that are for internal use only. Please refrain from using these objects in external applications. Some examples of these objects are:

- iFIX Alarm Summary Control
- iFIX Color Button Control
- iFIX Expression Editor Control
- iFIX WorkSpace Expression Editor

Modifying the ExpertGlobal.fxg or ExpertGlobals2.fxg

It is strongly recommended that you do not modify ExpertGlobal.fxg or ExpertGlobals2.fxg. If you do modify either of these files, you may experience problems installing a subsequent SIM. If the modified ExpertGlobal.fxg or ExpertGlobals2.fxg file has a newer date than the one in the SIM, the SIM installation will fail. You will either need to remove the modified file or rename it to successfully install a SIM.

Instead of modifying the file, you can copy any of the experts from this file and incorporate them into your own custom toolbar.

Data Bound Controls

Do not use Visual Basic Data Bound controls with iFIX. These controls are not supported by VBA.

Quit Method's SaveChanges Parameter

The SaveChanges parameter for the Quit method is not supported at this time. Regardless of the parameter you enter, you are prompted whether or not you want the option to save changes. If you select Yes, you are prompted to switch to the Configure environment to save changes. If you select No, the WorkSpace closes without saving changes.

Find and Replace Object Outside of the WorkSpace

The Find and Replace object is not accessible from clients that reside in a process outside the WorkSpace. Any programs you create using Visual Basic will not support the Find and Replace feature.

VisiconX and Large Databases

Caution is advised when using VisiconX and large databases. VisiconX controls do not perform well with really large databases.

Microsoft Windows Related Issues

Updating Root Certificates

If you are unable to run My-T-Soft, install the update for the root certificates. For more information and for the update, see Microsoft knowledge base article KB931125.

Incorrect Icons Appear in Start Menu or Desktop Shortcuts

Windows saves a cached copy of all icons. If the icon cache becomes corrupt, incorrect icons may appear.

To fix this issue, display hidden files in Explorer, delete the icon cache file, and restart Windows. This action restores the icon cache.

iFIX WorkSpace Related Issues

WorkSpace Startup

After starting the operating system, the first time the WorkSpace is started, you may notice that it takes longer for the WorkSpace to start up. Subsequent WorkSpace startups will not experience the delay. The delay is related to the number of pictures in the picture folder, so smaller projects may not experience the delay.

Print to File Option Not Working Properly For Pictures or Schedules

From the iFIX WorkSpace, when you open a picture or schedule and then click Print, the Print dialog box provides a "Print to File" option. If you select this check box, the file is not created. A dialog box does not appear requesting a file name. And, the file is sent to the printer, even though you selected the Print to File check box. There is no known workaround for this issue.

Changing the System Year to 2038 Causes Unpredictable Behavior

If you change the system year to 2038, the iFIX WorkSpace may behave unpredictably and shutdown. This is a C programming language Y2K issue and is caused by the standard time library in C. There is no known workaround for this issue.

Clicking the Calendar Control Shuts Down the WorkSpace

If you double-click a calendar control in the iFIX WorkSpace configure mode, or if you single-click it in WorkSpace run mode, it may shut down the WorkSpace. The Microsoft Calendar control causes similar issues in other Microsoft Office products. This is a known Microsoft issue.

A Picture or Dynamo Appears Distorted in Logical Coordinate System

It is possible that when a picture or Dynamo set is created with the Logical Coordinate System at one resolution, it will appear distorted when viewed on a monitor with a different resolution. This may occur

because the default display properties of Windows are causing the autoscale function of iFIX to function improperly, or are making a VBA form that prevents the picture or Dynamo from updating properly.

To correct this problem:

1. Open the Windows Control Panel.
2. Click the Appearance and Personalization link.
3. In the Personalization category, click the Customize Colors link.
4. Click the "Open classic appearance properties for more color options" link. The Appearance Settings dialog box appears.
5. Click the Effects button.
6. Clear the Show window contents while dragging check box.

NOTE: The TrueColor graphic display option also distorts some Dynamos. We recommend that you avoid using it.

Guidelines for Using the iFIX Cross Reference Tool

Avoid Missing References in your Pictures

When you use the Cross Reference Tool Report Wizard to generate a report on a .GRF file that has a missing reference, an error message appears in the background, and the Cross Reference Tool report generation is halted.

The report generation remains halted until you click on the Cross Reference Tool. This causes the following message to appear: "An action cannot be completed because a component (iFIX WorkSpace (Configure) is not responding. Choose "Switch To" to activate the component and correct the problem."

Use the Switch To button and acknowledge the several dialog boxes that appear. To avoid this problem altogether, check for missing references before running the report wizard.

Close All Dialog Boxes in the WorkSpace Before Running the Report Wizard

If you try use the Cross Reference Tool Report Wizard when certain dialog boxes are open in the WorkSpace, such as the User Preferences or the Find and Replace dialog boxes, an error may occur.

For instance, the following message may display: "The Cross Reference application could not export VBA script files. Your ExpertGlobal may be corrupted. Cross Reference is exiting."

Click OK to acknowledge this message and allow the Cross Reference application to exit. To prevent this message from occurring in the first place, close all dialog boxes in the WorkSpace before you run the Report Wizard in the Cross Reference Tool.

Avoid Running the Report Wizard with Read-Only Files

When you use the Cross Reference Tool Report Wizard to generate a report, the following message appears if one or more of the files is read-only: "An action cannot be completed because a component (iFIX WorkSpace (Configure)) is not responding. Choose "Switch To" to activate the component and correct the problem."

When you switch to the WorkSpace, this error appears: "Error number -2147211306. The file you are attempting to open has been renamed outside the WorkSpace. Please make sure you have write access to the file and try again."

Once you clear these messages, run the report again. Additionally, you can also use either of these techniques to resolve this issue:

Remove the read-only attribute - Identify all files being searched for that have a read-only attribute. Remove the read-only attribute.

Upgrade the file - Upgrade the file if you choose to leave the read-only attribute. To upgrade the file, remove the read-only attribute on the file, open the file in the WorkSpace configuration mode, and close the file. The file is automatically upgraded. You then have to add the read-only attribute to the file.

Working with Other GE Products

Using Historian with iFIX

Security Considerations

If security is enabled for Historian, and you do not have the necessary security group memberships, you will not be able to use Mission Control to start or stop Historian collectors. To give the iFIX WorkSpace and Mission Control access to the Historian collectors, configure a user name and password in one of the following Historian dialog boxes:

- Configure the Historian Server(s) Access this dialog box by clicking Configure Historian Server on the Historian toolbar.
- Historian Administrator Login Access this dialog box by opening the Historian Administrator and clicking Main.

Be sure to read the Historian IPI (Important Product Information) document for tips about using the product in general.

Please refer to the KB web site, https://digitalsupport.ge.com/, and look for article ID:15129 for authentication information for WebSpace and Historian

Regional Settings Considerations

The iFIX Scheduler and charts can use Historian data that supports Daylight Savings Time. However, before allowing automatic Daylight Saving Time to be used in a production environment, you should test your application under each of the following scenarios for proper behavior:

- While in Standard Time.
- While in Daylight Time.
- During the transition from Standard Time to Daylight Time.
- During the transition from Daylight Time to Standard Time.

Working with iFIX Drivers

Using the PowerTool after Installing iFIX

Each 7.x driver has a PowerTool. If you want to run the PowerTool configuration program of a 7.x driver without running iFIX, you must have an iFIX key installed.

Starting 7.x Drivers Automatically in iFIX

The startup list in the SCU typically has the /A command line parameter in the IOCNTRL.EXE program. The /A parameter is used to start all I/O drivers identified in the SCADA configuration of the SCU.

Use the Advanced tab of the PowerTool dialog box to set the Auto Start for each driver. If you do not use the /A parameter and:

- the Auto Start setting in the PowerTool is set to On, 7.x driver starts automatically.
- the Auto Start setting in the PowerTool is set to Off, 7.x driver does not start automatically.

Issues with Remote OPC Servers and the WorkSpace

When remotely connected to some OPC servers, the iFIX WorkSpace does not shut down after exiting. You may experience this issue with the following drivers:

- ABR
- GE9
- M32
- MBE
- OPC
- SI5
- SL4
- SI7

Refer to the GlobalCare web site for software downloads for I/O driver updates:

https://digitalsupport.ge.com

Using Third-Party Products with iFIX

Upgrade Older Versions of Third-Party Controls

Be aware that using an older version of some third-party controls, such as AMOVIE.OCX, may cause memory overwrites. These overwrites may in turn cause iFIX to perform unpredictably. To avoid problems with third-party controls, be sure to use the most recent version of all third-party controls.

Use the MSFlexGrid Control Effectively

If you use the MSFlexGrid control in an iFIX picture, you may encounter slow performance when you try to open or save your picture, or when you try to switch environments. To resolve this issue:

1. Open a new picture.
2. Drag and drop the MSFlexGrid control from the old picture into the new picture.

3. Delete the MSFlexGrid control from the old picture.
4. Save the old picture.
5. Drag and drop the MSFlexGrid control back into the old picture and re-save it.
6. Delete the new picture.

Licensing Issues with MSFlexGrid Control

When inserting an MSFlexGrid control into the WorkSpace, you may receive an error message indicating that you do not have a license to use this control. If this occurs, you need to either install Visual Basic on the computer where you are running WorkSpace, or add the licensing keys to the registry.

For more information, refer to the Microsoft Knowledge Base article 318597.

Register Third-Party OPC Data Sources Properly

Certain third-party OPC servers do not support the ValidateItems call. If you try to connect to items in that third-party OPC server through the iFIX Animations dialog box, you will get an error for items that exist in your OPC server: "ItemName Source does not exist. Create or Use Anyway?"

To eliminate this error, you need to make the following registry change for the OPC data source.

1. Add the string value "ValidateItemsNotSupported" to \HKEY_CLASSES_ ROOT\FIX32\DataSources\OPCSERVERNAME key.
2. Set the string value to "true".

For example, if your third-party OPC server is installed as SOMEOPCSERVER, then you would add the string value "ValidateItemsNotSupported" to \HKEY_CLASSES_ ROOT\FIX32\DataSources\SOMEOPCSERVER key, setting the string value to "true." This change verifies that data items on OPC Servers not implementing the ValidateItems call can be read.

Optimizing iFIX Performance

Activate Duplicated Tags by Reloading the Database

When you duplicate a tag in Database Manager, the new tag will only return a value once, unless you save and reload your database. For example, if you have a link in a picture that monitors the current value of an AI tag connected to a SIM register, you can duplicate this tag, rename it, and add a link to the picture that monitors this new tag. However, after the first read, subsequent reads will not work until you save and reload the database.

For More Tips on Optimizing iFIX...

Look up "optimization, introduction" in the online help Index. This link brings you to an Introduction in the Optimizing Your iFIX System guide. This guide lists tips and strategies you can use while developing pictures, writing scripts, and implementing your iFIX system.

iFIX VBA Tips and Tricks

Visual Basic for Applications, or VBA, is the standard scripting language built into iFIX. VBA can be used to customize and extend the functionality of iFIX. Use these guidelines when creating applications in the

Visual Basic Editor from iFIX:

- Refrain from using punctuation marks, pound sign (#), and VBA reserved words within VBA file names.
- Avoid generating a script within a script, that is currently executing. This causes unpredictable results.
- Do not use the WM_CLOSE SendMessage to close a user form; the object does not get destroyed properly. If you must close a form with a script, use the WM_DESTROY SendMessage.
- Avoid referencing the Intellution iFIX Find and Replace Mechanism v1.0 Type Library in your project. It causes an error when you compile your script.
- Be aware that a script based on an object's event should not call the DestroyObject method on the parent of the same object. Doing so causes unpredictable results.
- If you are using any of the iFIX subroutines to write data back to the database, use the F_CV field as the data link. Using the A_CV field may cause unpredictable results.
- Do not use the DblClick event when you configure a Data link for "In-Place" data entry. If you do, the DblClick event does not execute.
- Do not access class modules that are declared as PRIVATE in an out of process environment, such as user.fxg, expert globals, or any Global pages. This is not allowed.
- Be aware that when you change a source tag in iFIX, an automation error displays if you do not allow iFIX enough time to establish the new connection before you read the InputValue property. The wait time depends on the scan time of the event object source tag.
- If you set a tag with a static value as the source tag twice in a row, you will cause an automation error.

For more information on using VBA in your iFIX projects, look up "summaries" or "scripting, in iFIX" in the online help Index.

Code Example: Checking for a Null Value with the iFIX RealTime ODBC Driver

The iFIX RealTime ODBC driver was built to allow NULL values to be returned. For example, when checking iFIX real time data for a tag that does not exist, a value of NULL is returned when the tag is not found. In some instances, it may be helpful to check for the NULL value so that it is not counted as one string returned. The following is an example of code that will allow you to check for the NULL value:

```
If Record.ID "" Then
MSG = "A valid record exists"
Else
MSG = "A null situation exists"
End If
MsgBox MSG
```

Code Example: Creating a VB Client Application Properly

Creating a VB client application that accesses the WorkSpace.Application object through early binding causes unpredictable results. For example, the following sample script, which uses early binding, causes the WorkSpace to terminate unexpectedly:

```
Private Sub Form_Load()
Dim iApp As CFixApp
Dim iSystem As Object
Set iApp = CreateObject("WorkSpace.Application")
```

Set iSystem = iApp.System
End Sub

To avoid this problem, replace the second line in the above sample script with the following line:

Dim iApp As Object

Uninstall and Reinstall Issues

If iFIX is used by multiple users, and you uninstall and then reinstall it to a different folder, you may experience issues with some users. These user issues can also occur in other versions of iFIX.

For example, say UserA installs iFIX to C:\LocationA, and then both UserA and UserB make use of iFIX. If UserA uninstalls iFIX and then reinstalls iFIX to another location, say D:\LocationB, without deleting C:\LocationA, UserB may experience issues. Although UserA will be able to use iFIX in its new location without any problems, UserB will see several error messages if he tries to launch iFIX or the SCU, since his registry paths still point to C:\LocationA.

As a workaround, open the Windows Registry and delete the HKEY_USERS\USERID\Software\Proficy\iFIX\ProjectPaths key which contains the old paths. For example, deleting the HKEY_USERS\S-1-5-21-3882306234-4042192530-3641380709-1028\Software\Proficy\Proficy iFIX\ProjectPaths key would alleviate this issue for a user with an ID of S-1-5-21-3882306234-4042192530-3641380709-1028. After updating the Registry, be sure to restart iFIX.

IMPORTANT Add/Remove Information for Historian

If you choose to remove Historian from the Add or Remove Programs in the Control Panel, do not remove Microsoft system files if prompted to do so. This could cause critical operating system issues.

Company Name References

All references to the entity formerly known as GE Intelligent Platforms or GEIP now refers to GE Digital.

Fixed Defects in iFIX 6.5

Defect#	Area	Description
735091	WorkSpace	Startup Profile Manager cannot list domain members when connecting to domains with 15 characters. This issue is resolved in iFIX 6.5.
740156	Database Manager	Dbcvt.exe crashes when upgrading databases from iFIX 5.8 that contain SQD blocks.This issue is resolved in iFIX 6.5.
816875	Database Manager	DBCVT does not copy the Event Messaging in Sus-

Defect#	Area	Description
		pend Mode option on DA tags when upgrading a 5.8 PDB to a 6.1 PDB. This issue is resolved in iFIX 6.5.
801088, 00816459, 851489	Database Manager	Database exporter crashes due to buffer over-run. This issue is resolved in iFIX 6.5.
771064	WorkSpace	Alarm column format is incorrect in iFIX 6.0 after upgrade from iFIX 5.8. This issue is resolved in iFIX 6.5.
776856	WorkSpace	On Picture with 'SmoothShapes' property is set to True, Arc control disappears when AngleUnits property is set to '1-Radians'. This issue is resolved in iFIX 6.5.
815345	Alarming OPCUA	Event message from pre-6.0 SCADA is missing tagname, alarm type and current value fields. This issue is resolved in iFIX 6.5.
670604	Database Manager	Polish characters cannot be entered directly into Description cell of spreadsheet in the DataBaseManager using Polish Programmers keyboard. This issue is resolved in iFIX 6.5.
732675	Database Manager	Database Manager stops responding after aborting tag copying/pasting process. This issue is resolved in iFIX 6.5.
733107	Database Manager	Database Manager does not sort on tagname correctly. This issue is resolved in iFIX 6.5.
769442	Alarming	Alarm filtering fails with more than nine con-

Defect#	Area	Description
		ditions. This issue is resolved in iFIX 6.5.
794970	Database Manager	CSV Import with block type missing for a tag causes a DataBaseManager Crash. This issue is resolved in iFIX 6.5.
539040	WorkSpace	Cannot change Local Logical Name in SCU without administrative privileges. This issue is resolved in iFIX 6.5.
750613, 00844926	WorkSpace	Application Validator fails to open FactoryGlobals.fxg when WorkSpace is running. This issue is resolved in iFIX 6.5.
792510	WorkSpace	WorkSpace goes into an endless feedback loop and crashes when evaluating animation expressions containing cross referenced local variables. This issue is resolved in iFIX 6.5.
803926, 00807749, 898880	WorkSpace	Long tag name support causes VisiconXData.ocx to fail when ordering by the A_TAG field. This issue is resolved in iFIX 6.5.
659885	WorkSpace	Animations using shared lookup tables are exported into JSON file incorrectly. This issue is resolved in iFIX 6.5.
687594, 845664, 845667	WorkSpace	ALT+F4 key combination does not close WorkSpace in Run mode. This issue is resolved in iFIX 6.5.
790083, 641208	WorkSpace	Login window stays open for several minutes after successful login. This issue is resolved in iFIX 6.5.
790083	WorkSpace	Password expiration warn-

Defect#	Area	Description
		ing is not shown on the correct day. This issue is resolved in iFIX 6.5.
799781	WorkSpace	BackupRestore application in silent mode displays message dialog box. This issue is resolved in iFIX 6.5.
764778	WorkSpace	When iFIX is running as a service, the Windows Taskbar shows when the auto logged in iFIX user does not have task switching rights. This issue is resolved in iFIX 6.5.
670519	WorkSpace	FixDataSystem may randomly fail to read or write to known good tags. This issue is resolved in iFIX 6.5.
620125	WorkSpace	With old coordinate picture, difference in zoom level on copy and paste operations makes copied control very small or very large. This issue is resolved in iFIX 6.5.
753324	WorkSpace	WorkSpace crashes when picture with description string over 259 characters exists in PIC folder. This issue is resolved in iFIX 6.5.
679211	WorkSpace	GetSignature method has no way to require operator to enter a perform comment in Electronic Signature dialog. This issue is resolved in iFIX 6.5.
679424	WorkSpace	OPC20iFix crashes when clients try to exceed 32767 tags per group. This issue is resolved in iFIX 6.5.
682363	WorkSpace	"While fetching Alarm

Defect#	Area	Description
		from AlarmUserQ the method call ""eda_alm_get_user_que_item"" of EDA Toolkit crashes the WorkSpace."" This issue is resolved in iFIX 6.5.
741734	WorkSpace	iFIX STARTUP.log truncates at 50 lines. This issue is resolved in iFIX 6.5.
826171	Recipe	Recipe upload and verification fail when a tag's A_DESC field is used in a recipe item. This issue is resolved in iFIX 6.5.
840054, 805263, 863978	WorkSpace	WSQLODC.exe crashes due to internal buffer overflow. This issue is resolved in iFIX 6.5.
843990	Alarming	Alarm Summary message color not updated after changing the tag's alarm priority. This issue is resolved in iFIX 6.5.
00839500, 00833428, 850372	WorkSpace	Cannot use Totalizer block F_CV field and cannot configure D16 block. This issue is resolved in iFIX 6.5.
609084	WorkSpace	WorkSpace doesn't follow ""AlwaysShowMaximized"" preference set in WorkSpace.ini. This issue is resolved in iFIX 6.5.
657268, 871735	WorkSpace	Enhanced Line Chart displays NODATA for data sources that rarely change value when the data sources are added/deleted/modified at runtime. The NODATA condition doesn't self correct until either the data changes or another modification is made. This issue is resolved in iFIX

Defect#	Area	Description
		6.5.
663006	WorkSpace	SCU crash when accessing the Alarm Area Database from a secondary SCADA after being changed on the primary node. This issue is resolved in iFIX 6.5.
00521131_ CS0089534	WorkSpace	When multiple Dynamos exist on picture, double-click on Dynamo sometimes incorrectly runs Edit Dynamo Script for another object. This issue is resolved in iFIX 6.5.
802772	WorkSpace	Add ability to export security configuration programmatically. This issue is resolved in iFIX 6.5.
850297, 851613, 850297	WorkSpace	Invalid Command Line Parameter error when running Security Configurator from the SCU. This issue is resolved in iFIX 6.5.
620131	WorkSpace	Added feature to revert repeated Arrow key operation in single undo command. This issue is resolved in iFIX 6.5.
427939	WorkSpace	Historian tag containing hyphen in the last block fails to add to Chart Group with the error ""Expressions containing Historical items is not allowed"". This issue is resolved in iFIX 6.5.
754136	SAC	TcpTask may crash when using SQT block. This issue is resolved in iFIX 6.5.
768994	WorkSpace	With iFIX59_WorkSpace_013 installed, picture with Title Bar opening a little too far to the right in Run Mode. This issue is resolved in iFIX 6.5.

Defect#	Area	Description
768998	WorkSpace	WorkSpace Menu Bar, Status Bar and Scroll Bar are cut off once user comes back to Configuration Mode from Full Screen in Run Mode. This issue is resolved in iFIX 6.5.
720829, 805258, 822380	WorkSpace	WorkSpace Title bar visible in run mode after reconnecting to RDP session. This issue is resolved in iFIX 6.5.
765020, 739944	WorkSpace	A thick border displays when WorkSpace runs in Full Screen mode on system with Aero theme. This issue is resolved in iFIX 6.5.
783539, 788889, 844214	WorkSpace	Some pictures created before iFIX59_ WorkSpace_13 SIM show scroll bars or are scaled differently when opened with iFIX59_WorkSpace_ 13 SIM. This issue is resolved in iFIX 6.5. installed
647434	WorkSpace	Animations in a picture with Title Bar stop updating while an user holds the Left Mouse Button down on Title Bar during Run Mode. This issue is resolved in iFIX 6.5.
862622	WorkSpace	WorkSpace crash when Windows full user name exceeds 31 characters. This issue is resolved in iFIX 6.5.
725211	WorkSpace	Change Windows Password functionality of Security Login allows password with maximum length of 20 characters but stores only 19

Defect#	Area	Description
		characters. This issue is resolved in iFIX 6.5.
744127	Historian	WorkSpace takes a long time to start due to large list of Historian servers. This issue is resolved in iFIX 6.5.
842691	OPC AE Server	Subscription with filter by area does not receive alarm from tag whose alarm area configuration has been changed. This issue is resolved in iFIX 6.5.
610631	Networking	When 200 View nodes are connected to a SCADA node, the last View node name configured using NSD tag is shown blank on the WorkSpace. This issue is resolved in iFIX 6.5.
726426	Networking	TcpTask crashes. This issue is resolved in iFIX 6.5.
872556	OPC AE Server	iFix OPC AE Server does not log the name of the user that acknowledged an alarm. This issue is resolved in iFIX 6.5.
00846436, 00874597	WorkSpace	Corrupt picture leads to WorkSpace memory leak. This issue is resolved in iFIX 6.5.
844282, 866337, 868886, 869820, 862418	WorkSpace	WorkSpace hangs and displays ""Network Transaction"" when viewing tag status. This issue is resolved in iFIX 6.5.
864757, 868039	WorkSpace	WorkSpace cannot write to an OPC Data Server point. This issue is resolved in iFIX 6.5.
817661, 853651, 00877807	WorkSpace	Enhanced Chart reverts to default color settings after picture is closed.

Defect#	Area	Description
		This issue is resolved in iFIX 6.5.
824263	WorkSpace	When Standard chart control is placed in rightmost or bottommost area of picture, chart's Zoom-In and Time Cursor functions do not work. This issue is resolved in iFIX 6.5.
00819447, 00817975, 00880851, 866416	WorkSpace	Conmgr.exe shutdown at startup, or crashes due to memory leak. This issue is resolved in iFIX 6.5.
00783758, 00824672	WorkSpace	Some of the SCU dialogs and Standard Chart dialogs are cut off for some languages. This issue is resolved in iFIX 6.5.
829325	WorkSpace	When script for mouse move event is added for an OLE object control, Tooltip blinks when mouse hovers on control. This issue is resolved in iFIX 6.5.
838206	WorkSpace	VisiconX Grid Control, with 'DisplayHeaders' property set to False, makes header visible when switch to run mode. This issue is resolved in iFIX 6.5.
866136	SAC	Analog Alarm (AA) tag alarm is not fully regenerated after quickly disabling and then re-enabling alarming. This issue is resolved in iFIX 6.5.
868607	WorkSpace	MS Forms controls are resized incorrectly when visibility is false. This issue is resolved in iFIX 6.5.
829231	WorkSpace	iFIX Standard Chart AddLegendItem VBA call may fail. This issue is resolved

Defect#	Area	Description
		in iFIX 6.5.
846288	WorkSpace	When Rectangle is set with Fill Style 'GradientFillStyle' and Fade Type 'Reflected', the proportion of color blending varies with ratio of control's height and width. This issue is resolved in iFIX 6.5.
878390	WorkSpace	For Tags of 'AA' and 'DA' Block types, 'A_ENAB' field is listed twice in 'Field Names' list of Expression Builder. This issue is resolved in iFIX 6.5.
879556	WorkSpace	Export Picture utility gives error due to lost functions. This issue is resolved in iFIX 6.5.
00864617, 00871309, 00882856 , 00889112, 00889635, 00889766	Security	Automatic Login credentials are blank or corrupted when configured from a remote node. This issue is resolved in iFIX 6.5.
00864617, 00871309, 00882856 , 00889112, 00889635, 00889766 , 00879018	Security	Automatic Login when using mixed iFIX versions and a shared security path. This issue is resolved in iFIX 6.5.
885606	Database Manager	Export of large process database is incomplete. This issue is resolved in iFIX 6.5.
871969	Historian	ihFIXCtl.exe cannot stop and start the second instance of the Historian FIX Collector. This issue is resolved in iFIX 6.5.
851542	WorkSpace	Alarm horn get silenced even when process of alarm acknowledgment with Electronic Signature

Defect#	Area	Description
		is aborted. This issue is resolved in iFIX 6.5.
00862443, 00861296, 00889826	WorkSpace	On Picture initialization in run mode, Animation output doesn't get set if the source value remains unchanged. This issue is resolved in iFIX 6.5.
888373	WorkSpace	Historian iFIX Collector does not run as a service when started with iFIX. This issue is resolved in iFIX 6.5.

Known Issues in iFIX 6.5

Issue	Area	Description
DE124575	Upgrade	Productivity Tools or OPC UA Client Configuration Tool Does Not Start. If you have iFIX with Productivity Tools installed and you upgrade from to iFIX 6.5, manually update the FIX.INI to include this entry at the end of the [SCADA] section: RUN=%IFIX_CONFIG_SERVICE.EXE run -config ifix_config_service.json. Restart iFIX after you save your changes.
DE118716	OPC UA	OPC UA Clients Do Not Discover OPC UA Server on VMWare Image. When running iFIX with its OPC UA Server enabled on a computer that has VMWare installed, you may find that you cannot discover the OPC UA Server from clients on the local machine. In this case, you may repeatedly see the following error in the iFixUaServer.log file: Error: "Registration with Discovery Server failed." This occurs because the VMWare virtual network adapter fails to respond during Discovery Server registration, which causes the entire registration operation to time out. In order to work around this, you can disable the VMWare network adapter (if it is not used) in Control Panel. Otherwise, you will need to manually enter the endpoint URL of the OPC UA Server into client applications, since they cannot find the server by discovery. Note that this issue only affects discovery of the iFIX OPC UA Server and has no impact on further connectivity or functionality of the iFIX OPC UA Server.
DE122938	Install	OPC Core Components subinstall displays a request to install a VC 2013 Redistributable (version 12.0.30501). This error occurs only on a fresh install. It occurs because the target system already has the Microsoft VC++ 2013 Redistributable Update 5 (12.0.40660) installed. Acknowledge the message and continue. The install will run properly despite the mes-

Issue	Area	Description
		sage.
DE120941	OPC UA Client Driver	Cannot open OPC UA Client Driver Configuration Tool When the Windows Firewall is Enabled. Add port 9444 to the Windows firewall exception list, along with any other port associated with this driver that you want to include, such as ports 4855, 4856, and 4857
TA626596	iFIX OPC UA Client	iFIX UA client will not fully work with OPC UA Aggregators that change server namespaces dynamically. This is not supported in iFIX 6.5.
TA592883	Discover and Auto Configure	Discover and Auto Configure Does not Support Long Tags Names or OPC UA. These items are not supported in iFIX 6.5.
DE114780	WorkSpace	Size of HPLinearGauges Dynamo Not Maintained After Upgrade. This is a known issue in iFIX 6.5. When the HPLinearGauge Dynamo in picture is upgraded with the iFIX 6.5 Master Dynamo, then the updated Dynamo will be reduced in length. There is no workaround for this issue except to manually resize the upgraded Dynamo.
DE92547	Historian Integration	iFIX Collector Fails When Browsing iFIX Tags in the Historian Administrator. If you try to browse tags, for instance from the Add Multiple Tags from Collector dialog box in the Historian Administrator, the iFIX Collector will fail. Be aware that you can still add tags, up to 199 characters long, for collection using FixToHist.exe. This is a known issue with the Historian Collector in Historian 7.0 and has been addressed in newer versions.
DE91265	WorkSpace	Bad WebHMI Server Name Entered Into User Preferences or Web HMI Publish Screen Causes WorkSpace to Be Unresponsive. This is a known issue in iFIX 6.5 and only occurs if a you enter a bad server name.
DE90938	Upgrade	OPC UA Server Does Not Start. If you have iFIX with Productivity Tools installed and you upgrade to iFIX 6.5, then the FIX.INI file does not contain an entry for the iFIX OPC UA Server. As a workaround, manually update the FIX.INI to include this entry at the end of the [SCADA] section: RUNN=%IFIXUASERVER.EXE. Restart iFIX after you save your changes.
DE90685	Mission Control	HTC Tab is not Working With Historian Installed. In iFIX 6.5, Historical Collector actions are no longer supported from the iFIX Mission control application, mission.exe. Please use the Historian Administrator UI instead.
DE89991	Change Management	Alarm Shelving Related Fields Are Not Shown in the Text Compare Report. Alarm Shelving related fields are not shown in the Text Compare Report in the Change Management History window.
DE84751	Alarm Shelving	Alarm Shelving Status Incorrect When Alarms Are Sent Over AAM. When using the Auto Alarm Manager (AAM) with Alarm Shelving, be aware that the Alarm Shelving Status is incorrect when alarms are sent via AAM.
DE87524	Upgrade	Altered Table Failing for Microsoft Access Database Due to Long Tag Names and Descriptions. After upgrading to iFIX 6.5, when using Microsoft Access to log Alarms using ODBC, an error occurs. To use iFIX after an upgrade with Microsoft Access requires a manual update to the Registry and an update of the Microsoft Access database in Design View. The ALM_TAGNAME and ALM_TAGDESC (if it exists) rows needs to be formatted as a LONGTEXT (MEMO) field.

Issue	Area	Description
		Use these steps: 1. In the Windows Registry, make the following entries for the MaxLocksLimit key: REG_DWORD and 0x00030d40 (200000). To find the MaxLocksLimit key, look to the Microsoft Office version-specific Registry entry under HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft. 2. Open Microsoft Access. 3. In Microsoft Access, open the database previously configured for Alarm ODBC in iFIX prior to 6.1. 4. Right-click the table and select Design View. 5. Select the ALM_TAGNAME row, Data Type column, and then change Text to Memo. 6. Repeat the previous step with the ALM_TAGDESC row, if it exists in the table. 7. Save the Access database.
US244795	VisiconX	VisiconX Returns Oracle Error. When using VisiconX, be aware that you must configure your environment variables correctly for Oracle. If you select the Microsoft OLE DB Provider for ODBC Drivers as your data source, when you try to select an Oracle table, you will experience an error. On the Oracle Client machine where iFIX is installed, set the ORACLE_HOME environment variable to point to the Oracle Admin Client installation directory. For example: 1. Right-click My Computer and select Properties. 2. Click Advanced system Settings > Environment Variables. 3. In the System Variables panel, click New. 4. Add the ORACLE_HOME variable to the New System Variable box, then click OK. For example: ORACLE_HOME-E=C:\app\Administrator\product\12.1.0\client_1 5. Select the PATH variable in the System Variables panel, and click Edit. 6. In the Edit System Variable box, add the path to ORACLE_HOME at the start of the PATH variable: %ORACLE_HOME%\bin 7. Restart the computer. 8. Attempt to connect through VisiconX again to test connection succeeds.
DE30309	Terminal Server/Remote Desktop	Alarm Summary Blink Rate/Refresh Interval is overridden by the Terminal Server Throttle Configured in FixUserPreference.ini. The Alarm Summary Blink Rate/Refresh Interval is overridden by the Terminal Server throttle configured in FixUserPreference.ini when running the Alarm Summary on a Terminal Server Client or via the general Remote Desktop connection.

Issue	Area	Description
DE68669	Alarm Shelving	Alarm Shelve Duration is Based on System Time. Be aware that the durations are based off the system clock and not a timer.
DE85273	Database Manager	Alarm Area Mismatches for CTR, GAB, ITM, PAR, and P12 Loadable Blocks. For the CTR, GAB, ITM, PAR, and P12 blocks, an upgrade to iFIX 6.5 does not fix issues with the Alarm Area 2 and Alarm Area 3 ordering. As a workaround, you need to export the database to a .CSV file, edit the Alarm Area 2 and Alarm Area 3 values, and then reimport the database back into iFIX 6.5 to fix the designated Alarm Areas. If the blocks are created using iFIX 6.5, there is no issue with alarm areas.
DE86292	iFIX-SOA Service Provider	Tags Created After Connection Established to the SOA Server Appear Missing When Browsing Tag Properties on SOA Node. The workaround is to restart iFIX each time you add a new block type to the existing iFIX database.
DE71528	WorkSpace	Identifier Too Long Error for Long Tag Name on Script Behind Event. Microsoft Visual Basic limits character identifiers to a maximum of 255 characters.
DE75993	Recipes	Recipe Report Limits Tag Identifier to 100 Characters. This is a known limitation in iFIX 6.5.
DE81968	WorkSpace	Quick Trend and Tag Control Panel Have Tag Length Limitations. Tag Control Panel and Quick Trend Screens are limited to tag names of 234 characters.
DE82453	Upgrade	Alarm Shelving and OPC UA Configuration Tool Security Features Not Added to iFIX Administrative User on Upgrade. This is as designed for security purposes. After an upgrade, if you want to update your administrative groups to include the new security features, you will need to add them manually.
DE79939	WorkSpace	ToolTip Does Not Display Full 256 Character Tag Length in Command Script Wizard for Schedules. Tooltip does not show full tag length in this case. This is a known software limitation.
DE82077	WorkSpace	Tag Status Screens Have Tag Length Limitations. There are limitations on screen that will not allow the full tag name to be displayed in Tag Status pictures. Even with the use of tooltips, you are restricted to 160 characters.
DE69641	WorkSpace	New Document Option Is Disabled in the System tree for Microsoft Word and Excel Files. As a workaround, you can create the registry keys as described in the following articles. Restart the iFIX WorkSpace after doing making your changes. https://answers.microsoft.com/en-us/msoffice/forum/msoffice_o365admin/why-docobject-registry-keys-with-a- value-of-16-are/24cd9c98-46a9-4c10-8ca1-cb3933bd7817 https://community.qlik.com/docs/DOC-14030
DE80338	WorkSpace	Tag Lookup Takes Longer Than Expected. When browsing tags in the Expression Editor on a view node (iClient), it may take 50% longer to perform the initial tag lookup.

Issue	Area	Description
DE66431	Enhanced Charts	Long Tag Name Not Readable or Shrinks in Enhanced Charts. After inserting a Line Chart or XY Chart, a long tag name is not readable or shrinks on the chart display.
N/A	Historian Integration	iFIX Charts (with Historian data) Not Working on a System with Historian 7.0 Mirroring when Primary Historian Server is Unavailable. iFIX 6.5 currently does not support Historian 7.0 mirrored systems.
DE17435	Dynamos	Sometimes the Values Displayed on the HPTanksAnim and HPLinearGauges Dynamos Are Cut Off. Try saving the picture before switching to run mode or run the WorkSpace in Full Screen mode. Disabling Zoom to Fit may also display the values correctly.
DE14743	Web HMI Export	When Shape objects are aligned to each other with the Edge Width property set to 0, the objects display a white line within GE Web HMI browser client. When a picture is created in iFIX with Shape objects that are aligned to each other and the Edge Width property is set to 0, the objects in the exported picture display a white line when viewed within GE Web HMI. Workaround: If the Edge Width property is 0, set the Edge Style property to "EdgeStyleNone" in the object's property window, or set Edge Style to "No Edge" via the object's Right Mouse Menu option. Confirm that the objects look correct in iFIX Configure mode. Then, save and export the picture for Web HMI.
DE29895	WorkSpace	Some Anti-Aliased Lines that are Near Horizontal Appear Fuzzy. With SmoothShapes (anti-aliasing) enabled, edge lines of some objects can appear fuzzy when they are at certain angles... such as with line objects when they are in a near-to-horizontal position.
DE26574	WorkSpace	Some Text Objects Draw Lighter than Normal. Text objects with a font size of 13 or smaller will draw without anti-aliasing regardless of the SmoothShapes setting in the picture. Size 13 fonts with the bold property set will draw with anti-aliasing. Text draws more clearly with SmoothShapes enabled at higher resolutions. Pictures that contain many text objects viewed at low resolution may display more clearly with the SmoothShapes property set to False. Changing the font style from Regular to Bold, or increasing the font size improves the readability of the text. Dynamo sets with text objects that use small fonts may need to be edited in pictures where SmoothShapes is enabled. Changing the font style from regular to bold or increasing the font size improves the appearance of the text within the Dynamo.
DE25183	WorkSpace	Anti-aliased Objects with Edge Style = 6 (inside frame) will See Color Outside the Object Frame. Anti-aliased objects with edge style = 6 (inside frame) will see pixels for the background color or fill color outside the object's frame. There is currently no workaround.
DE29588	WorkSpace	LineChartPopUpHist.grf and LineChartPopUpReal.grf Pictures Display an Error when Switching from Configure to Run Mode. These popup pictures

Issue	Area	Description
		are meant for the associated Dynamo objects (Chart_LineHist and Chart_LineRealTime). When the Chart_LineHist or Chart_LineRealTime Dynamo is dropped onto a picture, it displays the associated popup screen to set the plot styles and time definitions. These pictures are not meant to be edited directly.
DE28601	My-T-Soft	An Error Message Appears when Trying to Start My-T-Soft after Installing iFIX. If you see a "server not licensed" error message from IMG, start the service manually. From Start menu, select My-T-Soft > License Information to open the IMG application, and click the Start Service button. You can also use the command line to start the service: Manage.exe START. After the service starts, try to run My-T-Soft again.
DE113972	VisconX	VisconX dialog boxes display a few headings with clipped text (in Configure mode only). When using the VisiconX controls, be aware that the Database and Record Source tabs may contain some subheadings with clipped text. This is a known issue due to a Microsoft coding limitation on text allowed on frames used within frames. There is no known workaround at this time.
DE151572	Historian	Unable to Configure Historian Server in the iFIX WorkSpace after installing Historian 8.1 or 9.0 Client Tools one time. When this issue is encountered, install the Historian 8.1 or 9.0 Client Tools a second time on the iFIX system, restart, and then try again to configure.
DE139692	OPC UA Server	The OPC UA Server cannot monitor more than 32,000 tag fields at a time. There is currently no support for more than 30,000 tags in the OPC UA Server.
DE150686	Configuration Hub	Model tags not initially shown in Expression Builder after Model Import. The workaround is wait a few minutes and do a refresh, or close the WorkSpace and then restart after a few minutes. The indirect tags should now be listed.
DE145434	Configuration Hub	Deleted Shelve Policy Still Appears in Configuration Hub UI. If you delete a shelve policy in the Database Manager, it will still appear assigned to tags in the Configuration Hub UI. No error appears when you open the tag in Configuration Hub. As a workaround, you need to manually update the tag with a new policy.
DE137521	Database Manager	Browse dialog opens slowly with IGS and IDS when connected to a large configuration. The browse button may take over a minute or more to open when with a large database. As a workaround, wait a few minutes for the database to open.
DE137082	iFIX WorkSpace	WorkSpace will not start when the domain user is added to the secure group after the install. After adding a user to the iFIX secure users group on a Domain, you may not have immediate access to iFIX resources (can't run iFIX). Wait for a few minutes and then try again.
DE152368	Configuration Hub	Default Tag values always displayed with US Regional Settings. The iFIX plugin for Configuration Hub is only supported with English regional settings.
DE153297	Configuration Hub	The Progress Bar for the Publish does not Update Fast. Publish operation may take a while depending on the number of tags being published to the

Issue	Area	Description
		active iFIX node. Please wait for the Done indication.
DE153266	Configuration Hub	No error seen when publishing simultaneously - Second publish hangs. It is recommended that you only perform one publish operation at a time.
DE153266	Configuration Hub	Firefox Browser - Model Tree: Object Type and Instance context menu options are not working. In the Firefox browser, in the Model panel, if any Object Type/Object is selected, and any right-click menu option is selected, then the operation is not being done. The workaround is to select the over-flow icon to do the intended operation.
US472663	REST API	JSON Files for REST API Have Wrong Encoding. If you make an edits to an iFIX JSON file (for instance: ifix_auth_service.JSON or ifix_tag_ser-vice.JSON), be sure that you save the file with UTF-8 encoding. For example, in Notepad, there is a drop-down for Encoding in the bottom right-hand side of the Save As dialog box where you can set the encoding before saving the file.
DE155428	Configuration Hub	Configuration Hub Registration fails when machine name contains non-English characters. Do not install Configuration Hub on computers with machine names containing non-English characters.
DE156789	Import	Importing CSV configurations created on a different locale than the SCADA not working. Importing CSV configurations that were created on a different locale than the SCADA is not supported.

System Requirements for iFIX 6.5

Software Requirements

GE recommends using the latest service packs for Windows operating systems. The minimum iFIX soft-ware requirements include:

- One of the following operating systems:
  - Microsoft® Windows® 10 (32-bit or 64-bit) Professional or Enterprise Edition.
  - Microsoft® Windows® 10 IoT Enterprise with LTSC enabled, or an operating system released under Long Term Service Channel for iFIX for IoT. Use of iFIX for IoT is further restricted by your End User License Agreement (EULA), please see your EULA for details.
  - Microsoft® Windows® 8.1 (32-bit or 64-bit), Professional or Enterprise Edition.
  - Microsoft® Windows® Server 2019.
  - Microsoft® Windows® Server 2016.
  - Microsoft® Windows® Server 2012 R2.

NOTE: Only English Windows IoT, with English regional settings, is supported with English iFIX; other language operating systems or regional settings for Windows IoT are not supported.

TIPS: Since Microsoft Windows has continuous updates, you should run the Windows update feature to get the latest Windows software for use with iFIX. Some operating systems require Microsoft KB2999226 to be installed before you can install iFIX. For Windows Server 2012 R2, you must have KB2919442 and then KB2919355 installed before installing KB2999226. For Windows 8.1, you just need KB2999226.

- Network interface software for TCP/IP network communication and certain I/O drivers.
- If you are using third-party software along with iFIX, make sure that the third-party software is also supported for the operating system you are running iFIX on. For instance, if you are running iFIX on Microsoft Windows Server 2019, your third-party software must also be supported on Windows Server 2019.
- If using iFIX and Historian on the same machine, it is highly recommended to install iFIX first.
- An I/O driver for iFIX SCADA servers. GE supplies I/O drivers for many programmable controllers or you may purchase a driver separately.

  IMPORTANT: Be certain that before you purchase an I/O driver, that the driver is compatible with the hardware and operating system that you intend to run it on. For example, if the driver is not supported on a specific operating system, then you cannot use that driver with iFIX running on that operating system. For more information on iFIX supported drivers and their respective operating systems, refer to the GE Digital support web site at: http://ge-ip.force.com/communities/.

- If using VisiconX and Historian, you must install the Historian OLE DB driver.
- To run the iFIX Plug-in for Configuration Hub, the following browsers were tested:
  - Google® Chrome
  - Microsoft® Edge based on Chromium
  - Mozilla® Firefox
  - Apple® Safari (MAC OS)

  NOTE: Sometimes the MAC OS cannot resolve the system name. In this case, update the hosts file. Also, you will be required to manually install the Configuration Hub root certificate on the MAC OS.

- One of the following relational database applications, if relational database software is used with iFIX:
  - Microsoft® SQL Server 2017
  - Microsoft® SQL Server 2019
  - Oracle® 19c
  - Oracle® 18c
  - Microsoft® Access 2000 (or higher). Microsoft Access is supported for local installs only

Hardware Requirements - iFIX SCADA Server

For an iFIX SCADA server, the recommended minimum hardware requirements are:

IMPORTANT: The minimum requirements below assume that you are running a SCADA server without additional applications (such as EDA applications) and a minimal amount of tags. If you want to run more applications or increase your tag count, you will need to increase your hardware support for better performance. You should scale your system based on number of tags. For Enhanced Failover, the following requirements apply to both the primary and secondary computers.

- A 3.0 GHz Intel® Core™ i5 Processor or equivalent with 8GB of memory. For better performance, please consider using a faster processor and more memory.
- SpeedStep® technology is not supported and must not be enabled.
- For time synchronization, the Windows Net Time and W32tm commands are both supported. However, if using the W32tm command, be sure to use the /nowait instruction when resynchronizing the clock. For example: W32tm /resync /nowait. The /nowait parameter instructs the operating system to make a stepping adjustment against the time server.

NOTE: With virtual machines, the host and guest operating system need to synchronize against an external physical Network Time Protocol (NTP) Server.

- The power save settings on your computer must be disabled. Do not use any power setting features that affect CPU clock speed. For Enhanced Failover, the power save settings on both computers and dedicated network card (NIC) must be disabled.
- For Enhanced Failover, you need one additional Gigabit-Ethernet card (or better) dedicated for SCADA-to-SCADA traffic (for a total of at least 2 network cards), or the VMXNET 3 network adapter NIC. The dedicated SCADA-to-SCADA network card should be excluded from the iFIX-to-iFIX network (not enabled for LAN redundancy), and used exclusively for Enhanced Failover synchronization. Both network cards must be of the same speed, and appear on the compatibility list for each card. It is strongly recommended that the cards be of the same make and model number, and use the same drivers.
- For Enhanced Failover, you must use a direct connection via a Cat6 crossover cable, without going through any switches, hubs, or routers. Due to limited bandwidth and latency, wireless networking technology should not be considered.
- For Enhanced Failover, the Primary and Secondary SCADA computers must be located physically next to each other, in the same location/room.
- For Enhanced Failover, Jumbo Frames technology must be used on the dedicated network. Jumbo Frames technology allows for an Ethernet frame of 9000 MTU for the payload, compared to a frame of 1500 bytes without the Jumbo Frames.
- A minimum of 40 GB of free hard drive space for iFIX pictures, databases, alarm files, and other data files, in addition to the free disk space required by the operating system for Windows Updates. It is strongly recommended that many GBs of additional free space exist on the hard drive to avoid performance issues.
- Be aware that iFIX alarm and historical data files grow dynamically. If you plan to perform extensive alarm or data collection on a node, you may need more disk space on that particular node.
- Other GE products, such as Proficy Plant Applications and Proficy Historian, impose additional requirements. Refer to the System Requirements in the associated product's electronic books for that product's specific system requirements.
- 100 MBit or faster Full Duplex TCP/IP-compatible network interface adapter for iFIX network communication between SCADA and Client nodes.

  NOTE: iFIX does not support NetBIOS or IPv6.

- One free direct-connect USB port. Some touch screens, pointing devices, and I/O drivers require a serial port. Additional ports for I/O hardware should be ordered with the computer.
- For Enhanced Failover, ensure that the following ports are open on your firewall: UDP port 53014 needs to open for the Sync Card and TCP 2010 needs to open for the SCADA NIC.
- SVGA or better color monitor with a 24-bit (16,777,216 colors) graphics card capable of at least 1024x768 resolution.
- Two-button mouse or compatible pointing device (such as a touch screen) that can open a context menu.

Hardware Requirements - iFIX iClient (View)

For iFIX client computers, the recommended minimum hardware requirements are:

- A 3.0 GHz Intel® Core™ i3 Processor or equivalent with 4GB of memory. For better performance, please consider using a faster processor and more memory.

  NOTE: To use more than 4 GB of memory on a 32-bit platform you need to use Physical Address Extension (PAE). For more information on PAE please reference: http://msdn.microsoft.com/en-us/library/windows/desktop/aa366796%28v=vs.85%29.aspx.

- SpeedStep® technology is not supported and must not be enabled.
- For time synchronization, the Windows Net Time and W32tm commands are both supported. However, if using the W32tm command, be sure to use the /nowait instruction when resynchronizing the clock. For example: W32tm /resync /nowait. The /nowait parameter instructs the operating system to make a stepping adjustment against the time server.

  NOTE: With virtual machines, the host and guest operating system need to synchronize against an external physical Network Time Protocol (NTP) Server.
- The power save settings on your computer must be disabled. Do not use any power setting features that affect CPU clock speed.
- A minimum of 20 GB of free hard drive space for iFIX pictures, databases, alarm files, and other data files, in addition to the free disk space required by the operating system for Windows Updates. It is strongly recommended that many GBs of additional free space exist on the hard drive to avoid performance issues.
- Be aware that iFIX alarm and historical data files grow dynamically. If you plan to perform extensive alarm or data collection on a node, you may need more disk space on that particular node.
- Other GE products, such as Proficy Plant Applications and Proficy Historian, impose additional requirements. Refer to the System Requirements in the associated product's electronic books for that product's specific system requirements.
- 100 MBit or faster Full Duplex TCP/IP-compatible network interface adapter for iFIX network communication between SCADA and Client nodes.

  NOTE: iFIX does not support NetBIOS or IPv6.
- One free direct-connect USB port. Some touch screens, pointing devices, and I/O drivers require a serial port. Additional ports for I/O hardware should be ordered with the computer.
- SVGA or better color monitor with a 24-bit (16,777,216 colors) graphics card capable of at least 1024x768 resolution.
- Two-button mouse or compatible pointing device (such as a touch screen) that can open a context menu.

Wireless Devices and iFIX

It is strongly recommended that you do not run SCADA nodes on wireless devices. Running an iFIX SCADA on a wireless device may impact performance, as some wireless protocols fall below the recommended bandwidth requirements.

Virtual Machine Support

As part of our development testing and qualification, we make extensive use of virtualized environments. iFIX does not target any specific hardware or virtualized platform.

GE Digital will support the functional operation of the product that is running on a supported Operating System in a virtualized environment and will address any functional issues related to the software.

GE Digital cannot guarantee performance of the software in the virtualized environment due to the wide range of parameters associated to the hardware, configuration, memory settings, 3rd party software, and the number of virtual sessions running on the same hardware, all of which can affect performance.

It is the responsibility of you, the customer, to ensure that the performance of the GE HMI/SCADA software and application are adequate to meet the needs of their runtime environment. GE does not support issues related to functionality that is not available as a result of running in a virtual machine. Examples include the functionality of card level drivers such as Genius, RMX, SA85 and functions requiring direct

video access, or functionality of other software running in the same environment. It is your responsibility to check with the vendor of those applications for their ability to run in a virtualized environment.

Each virtual machine instance that is using our software is required to have a valid license. The licensing in a virtualized environment will depend on the access to a hardware key or a license server depending on the selected license type.

Remote Desktop (Terminal Server) Support

When using Remote Desktop with iFIX, the following operating systems are supported for your server machine: Microsoft Windows Server 2012 Standard or Enterprise Edition, Microsoft Windows Server 2016 Standard Edition, and Microsoft Windows Server 2019 Standard Edition.

The following Remote Desktop Client configurations were tested with iFIX:

- Microsoft Windows 8.1: Remote Desktop Connection Version 6.3.9600 – Remote Desktop Protocol 8.1
- Microsoft Windows 10: Remote Desktop Connection Version 10.0.19041 – Remote Desktop Protocol 10.8
- Microsoft Windows Server 2012 R2: Remote Desktop Connection Version 6.3.9600 – Remote Desktop Protocol 8.1
- Microsoft Windows Server 2016: Remote Desktop Connection Version 10.0.14393 – Remote Desktop Protocol 10.2
- Microsoft Windows Server 2019: Remote Desktop Connection Version 10.0.17763 – Remote Desktop Protocol 10.6

Compatibility with other GE Products

Several GE products work with iFIX. The following is a general set of versions tested to work with the iFIX 6.5 product:

Product	Required Version
Plant Applications Dynamos	8.2, 8.1.
Batch Execution	5.6.
Operations Hub	2.0.
CIMPLICITY	11 and 11.1.
Historian	9.0, 8.1, 8.0. **NOTE:** If you are using VisiconX with Historian, you must install the Historian OLE DB driver.
Change Management (PCM)	9.5.
Task List	2.6 SP1.
Workflow	2.6 SP1.
Webspace	6.0 and 5.0. **NOTE:** When configured for WebSpace, none of the iFIX SCUs on WebSpace Server should be configured to start iFIX as service, as this is a unsupported configuration.
Win911	4.20.10

DreamReport	5.0 R2 for Proficy
IGS	7.68 or later

NOTE: For information on product compatibility with critical Microsoft security patches, go to the GE Digital support web site:

https://digitalsupport.ge.com/communities/en_US/Article/Information-on-Product-Compatibility-with-Critical-Microsoft-Security-Patches

You will need a customer login to access this page.

Index