# Kepware Technologies

# KEPServerEX Client Connectivity Guide for GE's Proficy iFIX

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# Table of Contents

# 1.Overview and Requirements

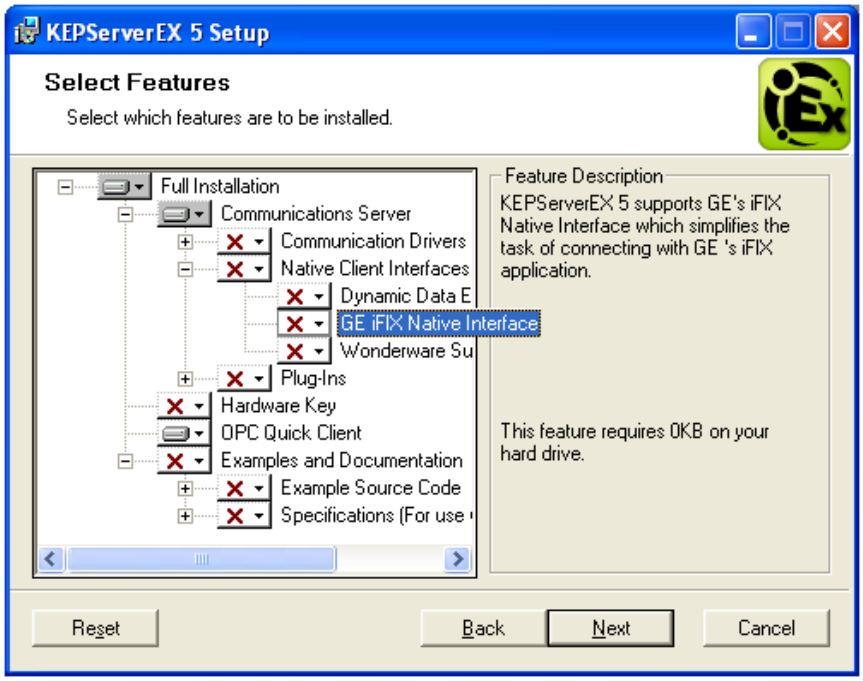
This guide will demonstrate how to establish a connection between the KEPServerEX OPC server and GE's Proficy iFIX.

**Note:** For this tutorial, Proficy iFIX version 5.0 is used.

## 1.1 Installing KEPServerEX

Users must install Proficy iFIX before installing KEPServerEX, because files are installed to it in addition to the server.

1. To start, double-click on the KEPServerEX icon and select **Run** or **Open** to start the install. If an active content warning is displayed, click "Yes" to continue.
2. In the installation welcome screen, click **Next**.
3. In **End-User License Agreement**, click **I accept the terms in the License Agreement**. Then, click **Next**.
4. Continue through the installation, changing the settings as desired.
5. In **Select Features**, expand the driver tree in order to view and select the drivers desired for install. Then, expand **Native Client Interfaces**.




6. Next, open the **GE iFIX Native Interface** drop-down menu and select **Will be installed on local hard drive**.
7. Then, click **Next**.
8. Click **Install** to start the installation.

   **Note:** Users that installed iFIX after KEPServerEX will have to re-run the server installation and select **Modify** in order to select the GE iFIX Native Interface.

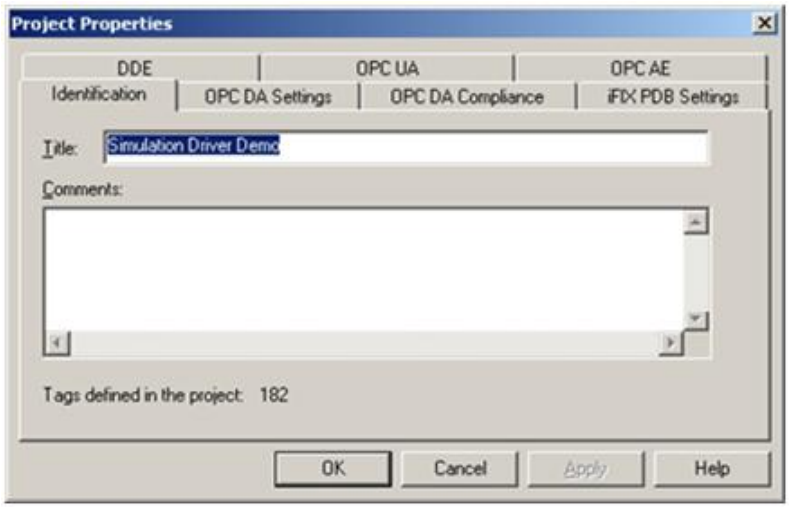
# 2.Preparing KEPServerEX for an iFIX PDB Connection

Users must complete the following before continuing with the tutorial:

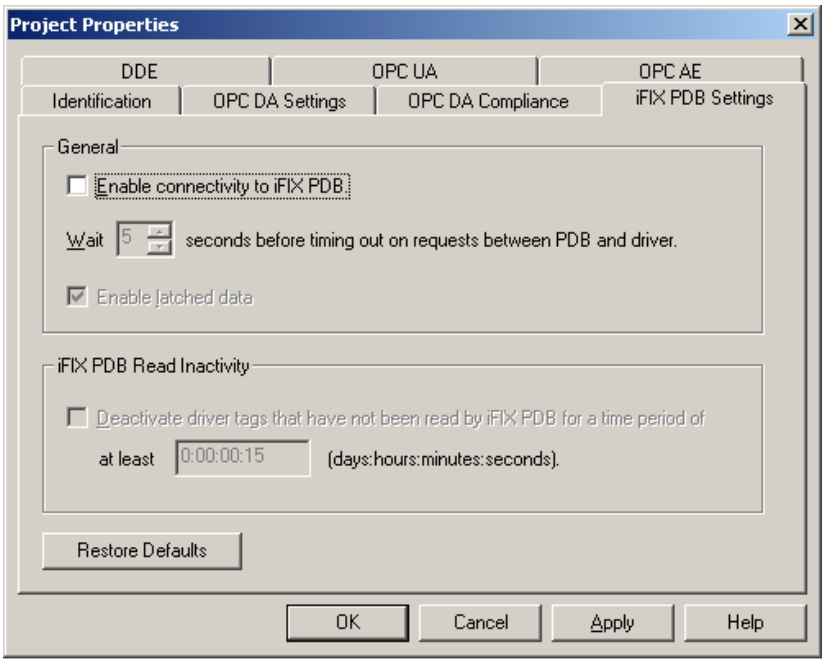
- Configure the KEPServerEX application. Users may either select the appropriate driver and settings or run the **Simulation Driver Demo** that is included with KEPServerEX. The **Simulation Driver Demo** project will be used for all examples in the tutorial.
- Start KEPServerEX and load the **Simulation Driver Demo** project. Once the server project has been loaded, open the **Runtime** menu on the main menu bar and verify that the server project has been connected.

In order for IDS components to be installed, iFIX software must be installed before KEPServerEX.

1. Open the KEPServerEX project. Then, click **File** | **Project Properties**.




2. Select the **iFIX PDB Settings** tab and then check **Enable connectivity to iFIX PDB**.

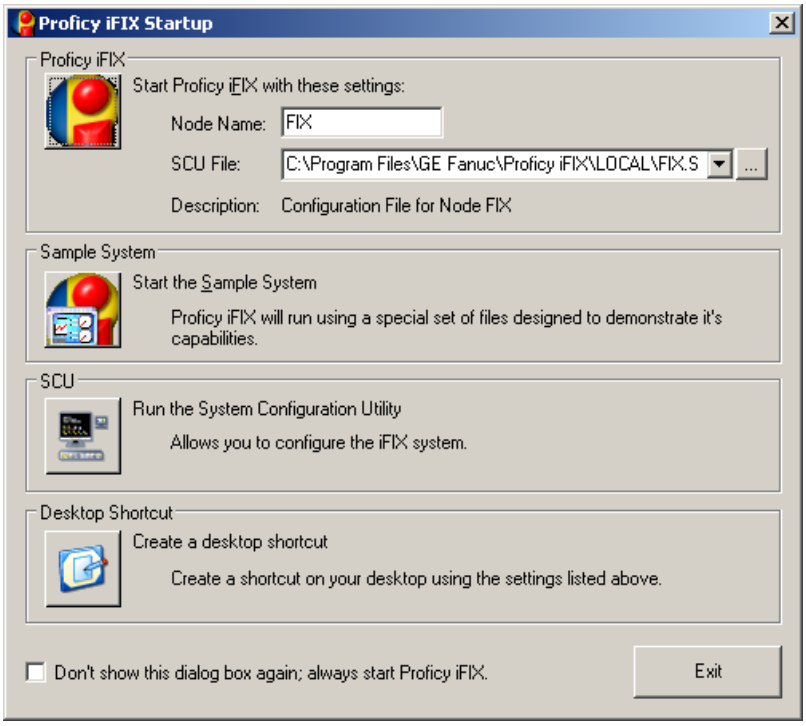


3. Leave the remaining fields at their default settings and then click **OK**.

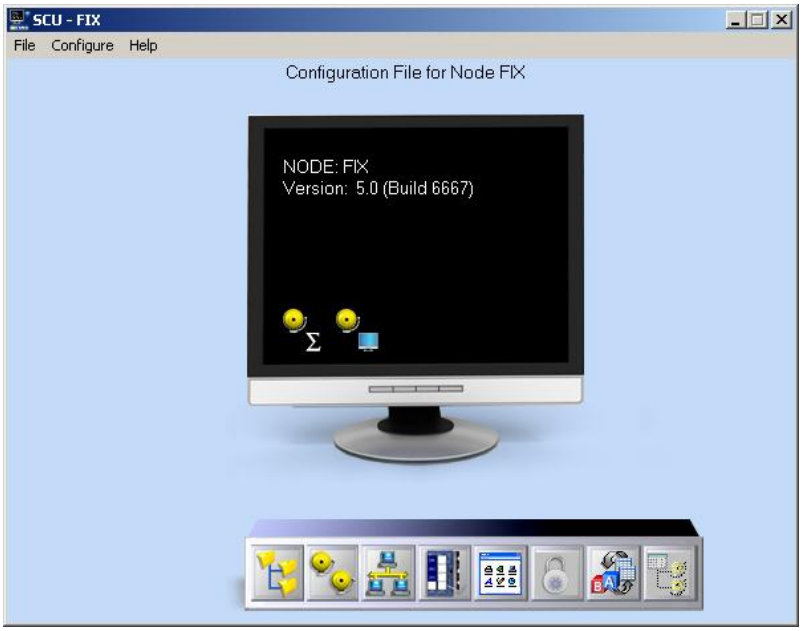
**Note:** For more information on the tab's parameters, click **Help**.

# 3. Connecting to the Server from iFIX

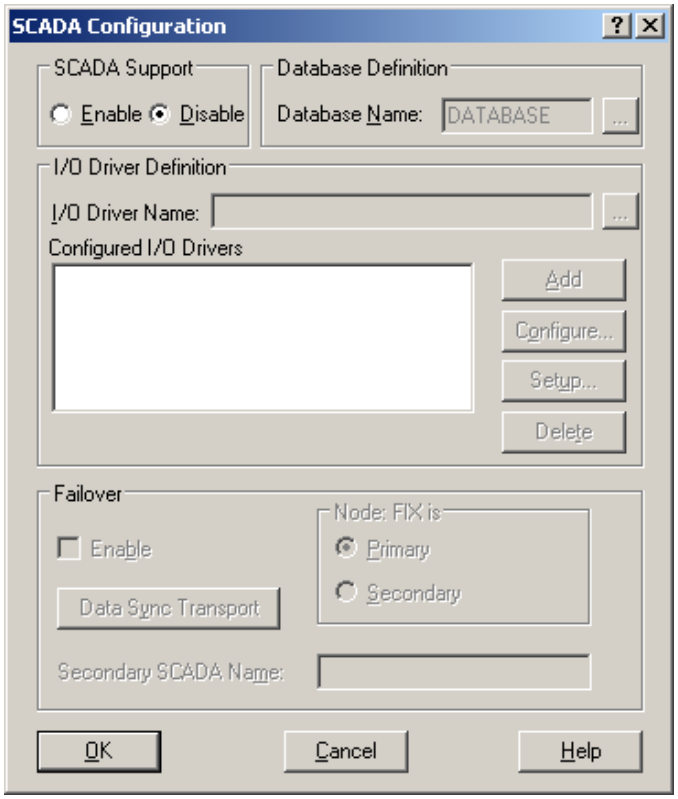
1. To start, open the **Proficy iFIX Startup** menu and then click **Run the System Configuration Utility**.



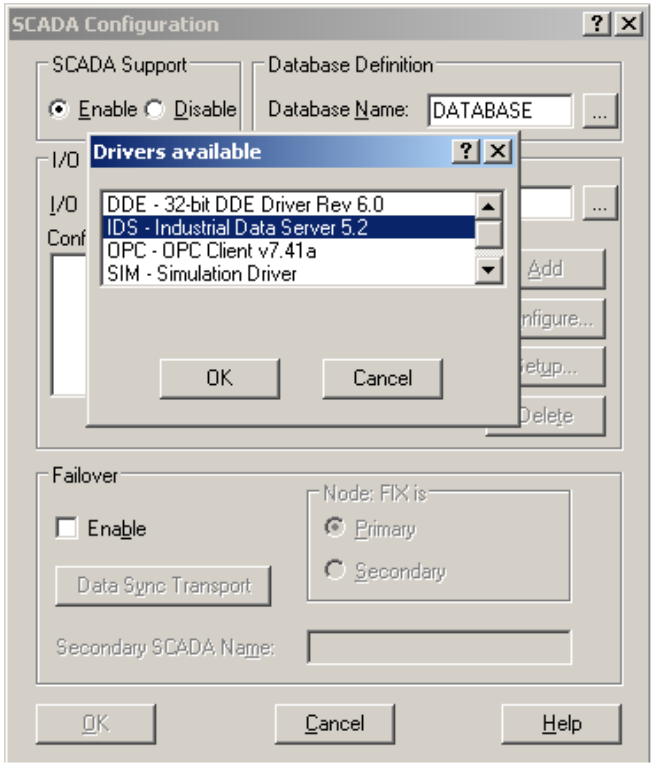

2. Next, click the **SCADA Configuration** icon located in the bottom of the **SCU - FIX** window.



3. Under **Scada Support**, select **Enable** to activate the **Database Definition** and the **I/O Driver Definition** dialog sections.

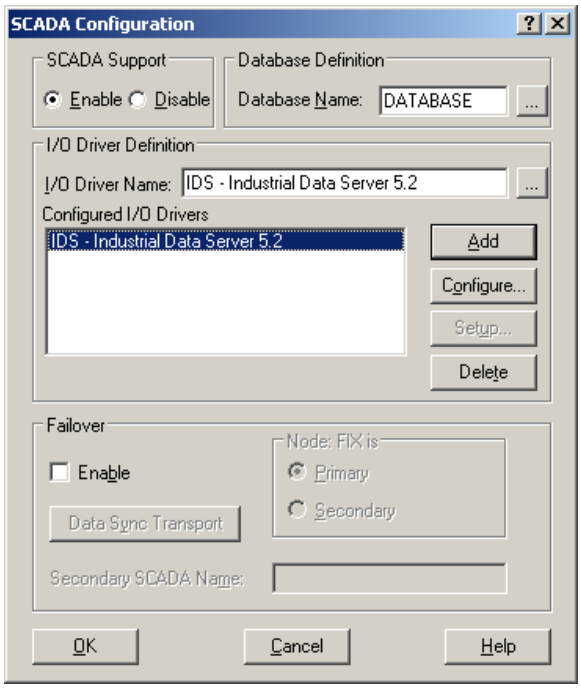



4. Under **Database Definition**, accept the default database name "DATABASE." Then, click the **I/O Driver Name** browse button. In the list of available drivers, select **IDS – Industrial Data Server** and then click **OK**.



**Note:** Newer versions of the IDS driver will also work with KEPServerEX.

5. To add the Industrial Data Server to **Configured I/O Drivers**, click **Add**. Then, click **OK**.

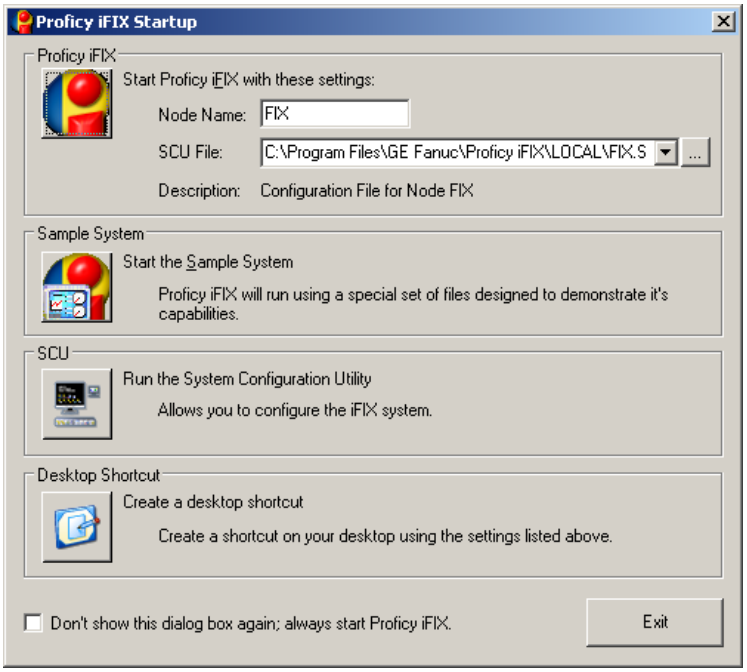



**Note:** The SCU window should now display a SCADA Configuration icon.

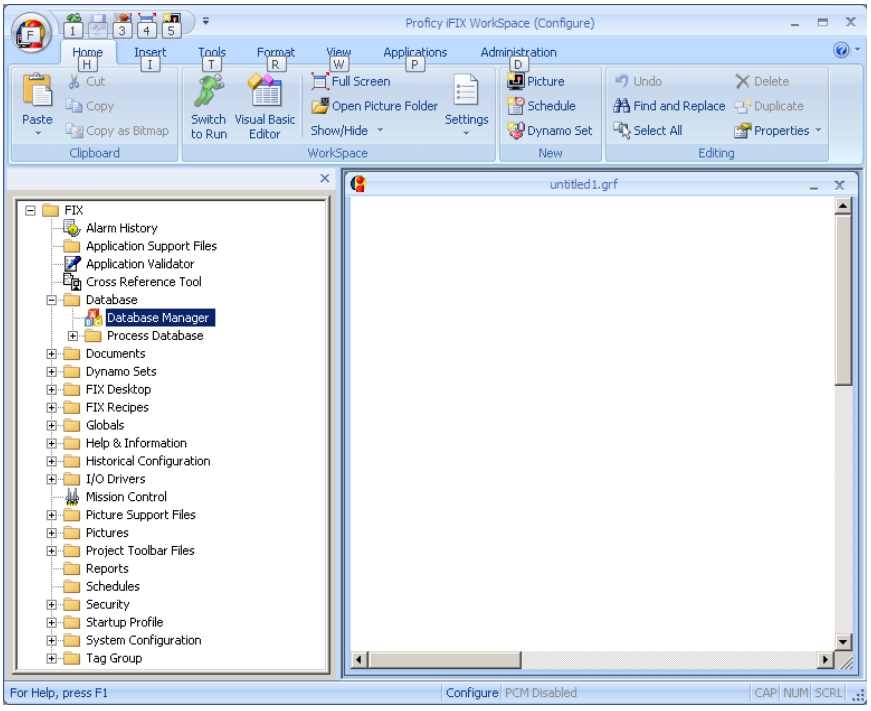
6. Next, save the configuration by clicking **File** | **Save**. Keep the default name.
7. Click **File** | **Exit** to close the window.

# 4. Adding Tags to iFIX

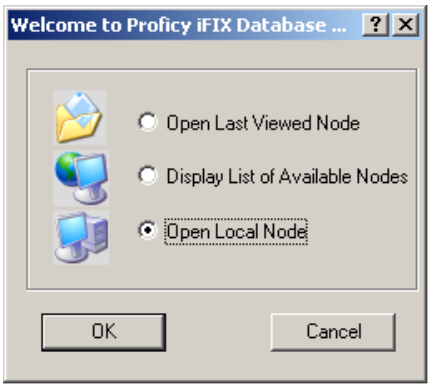
1. In order to receive data from the server, tags must be added to iFIX. In **Proficy iFIX Startup**, launch **Proficy iFIX**.



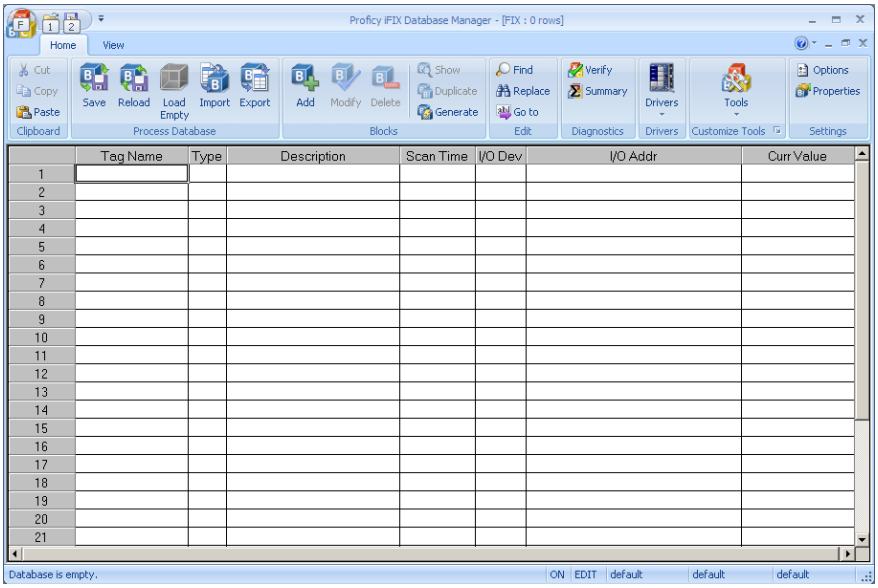

2. In the Proficy iFIX workspace, expand the **Database** folder in the project tree and then double-click on **Database Manager**.



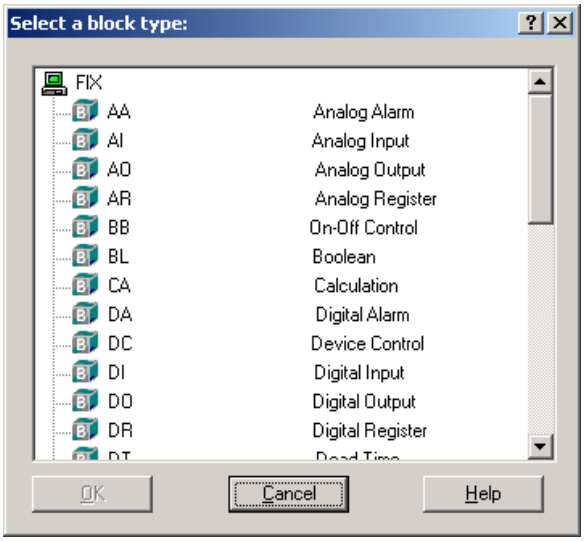
3. In **Welcome to Proficy iFIX Database**, click to select **Open Local Node**. Then, click **OK**.



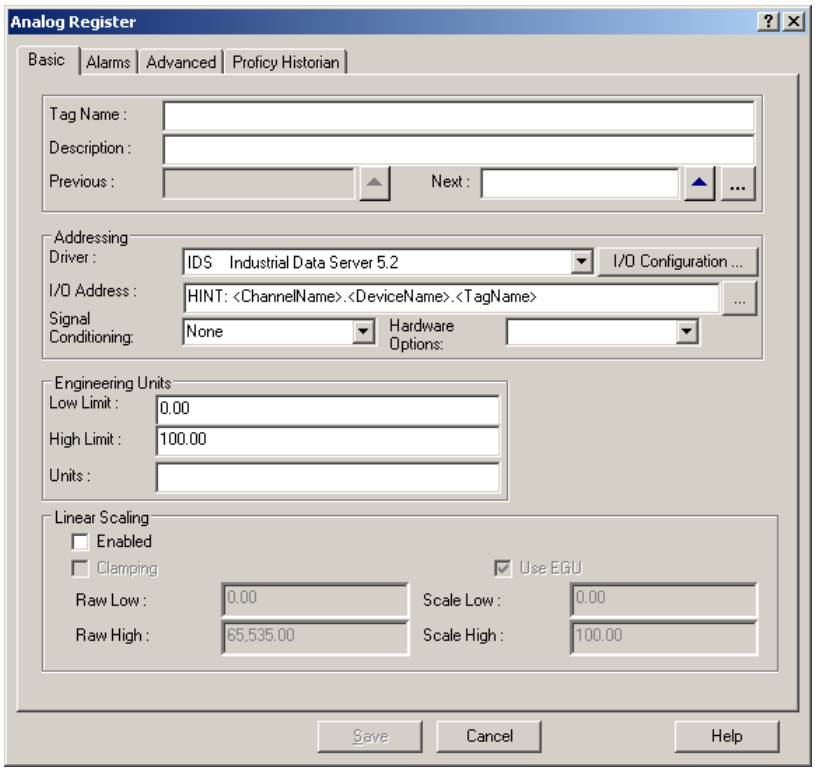

4. In the **Proficy iFix Database Manager**, add a tag to the database by clicking **Add** within the group of **Blocks** icons.




5. In **Select a block type**, select **Analog Register**. Then, click **OK**.

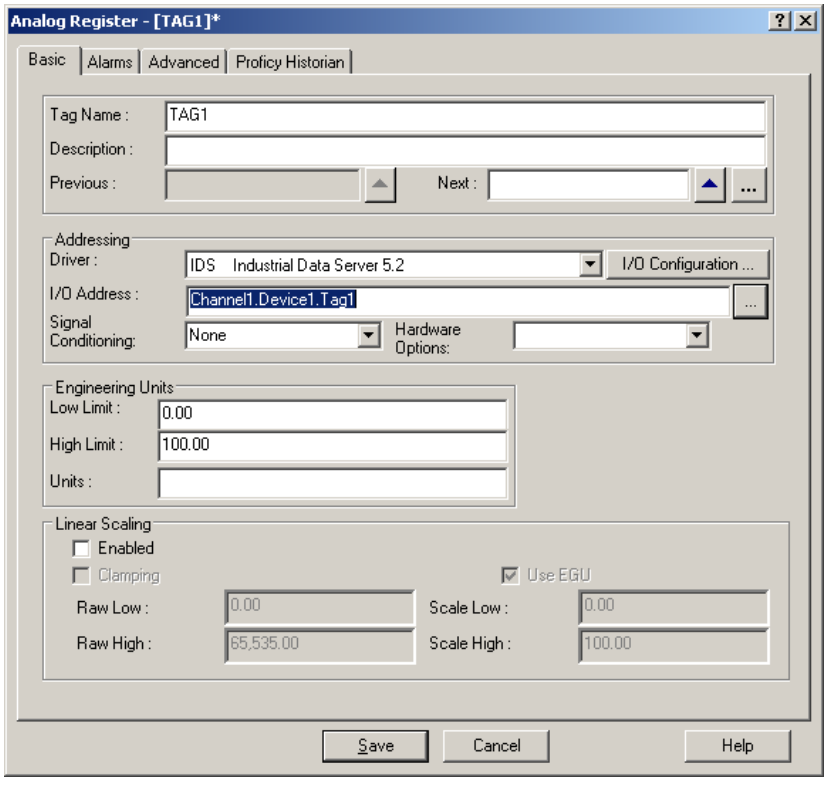


6. In **Analog Register**, enter a tag name. For this tutorial, enter "TAG1".

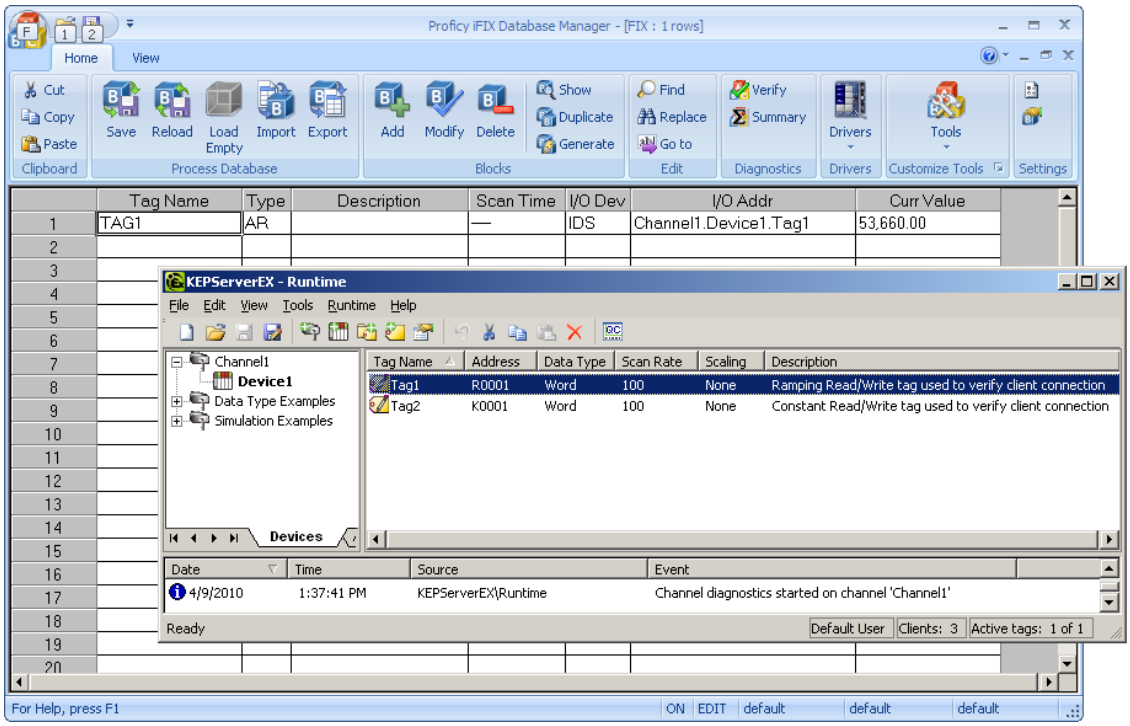



7. Next, enter an I/O address that corresponds to the item desired in the server. The format is *<Channel Name>.<Device Name>.<Tag Name>*. For this tutorial, specify the I/O address of the project tag "Channel1.Device1.Tag1".

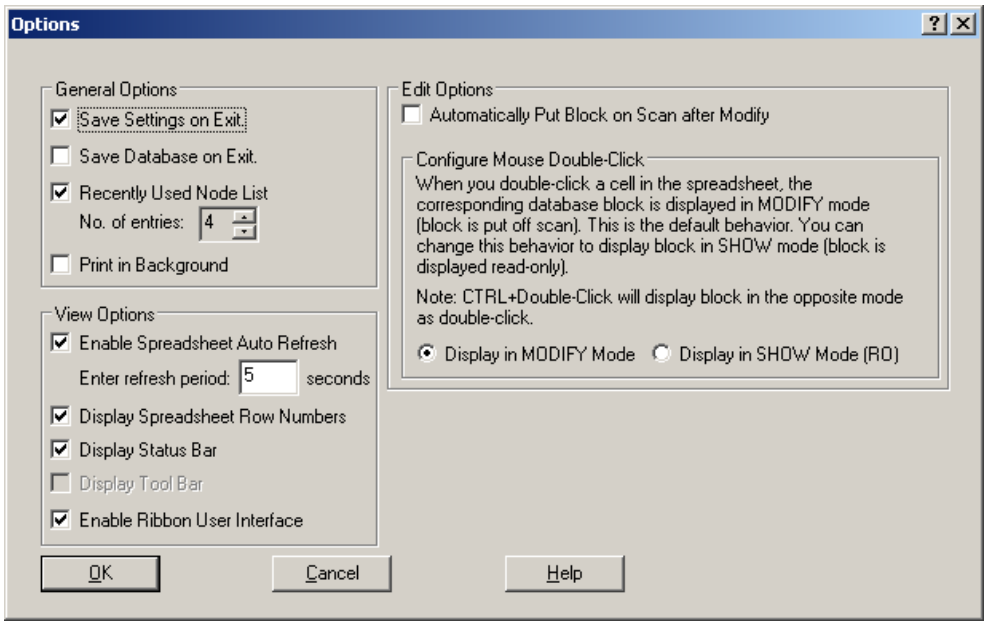
8. Leave the remaining fields at their default settings. Then click **Save**.



**Note:** The new tag should now be visible in the first row of the Database Manager.




9. The database spreadsheet does not show changing data by default. To view updates of changing data, select **Options** within the group of **Settings** icons. Then, check **Enable Spreadsheet Auto Refresh**.




10. The tag that has been created in iFIX may now be used in an HMI display.

# 5. Using Kepware's OPC Quick Client

Kepware provides an OPC client application for testing purposes with each installation of KEPServerEX. For more information, refer to the OPC Quick Client help documentation.