

Using OPC90 with Intellution iFIX

The OPC client capabilities of the GE Fanuc iFIX MMI, make it easily configured to exchange data with OPC90 Server. This document provides a general overview on how to setup iFIX to exchange data with OPC90. Consult the iFIX documentation for specific details on its use.

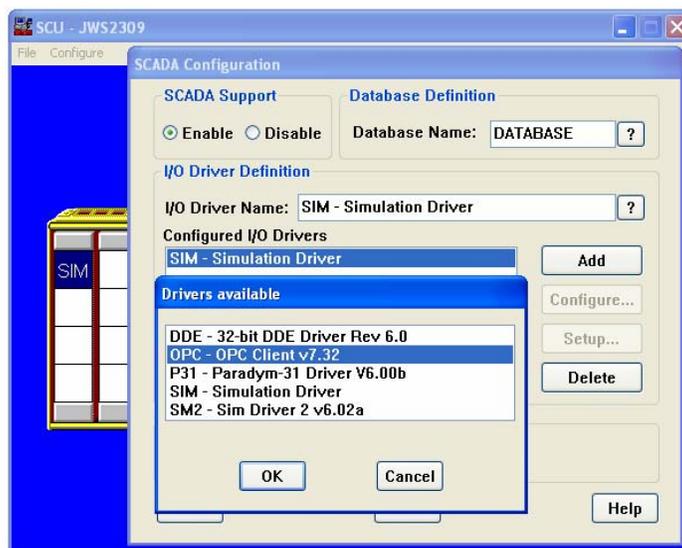
Before beginning, make sure both iFIX and OPC90 Server have been correctly installed. This includes the iFIX OPC Client driver found on the I/O Drivers and OPC Servers CD. If iFIX and OPC90 are installed on separate PCs, make sure the DCOM settings for OPC90 will allow remote access by iFIX. See the section entitled "Using DCOM" for instructions on how to configure DCOM settings.

Before configuring iFIX, the OPC90 Server database must be defined. Afterwards, do the following steps to configure iFIX.

- 1.) Use the iFIX System Configuration Utility to include the OPC client driver.
- 2.) Startup the iFIX workspace.
- 3.) Use the iFIX Power Tool for OPC Client program to define the server name, groups and items it will be accessing from OPC90 Server.
- 4.) Use the iFIX Database Manager to define iFIX blocks to be associated with the OPC tags defined in the preceding step.
- 5.) Use the iFIX workspace graphics editor to define database datalinks to be displayed.

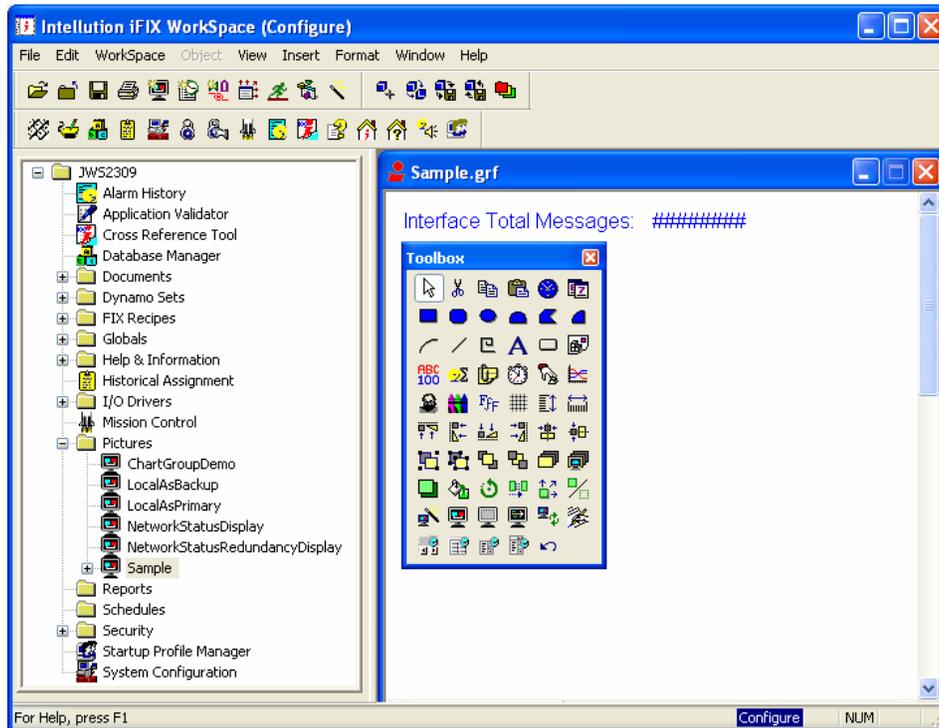
Step 1

Run the iFIX system configuration utility (SCU), select configure SCADA and add the OPC driver as demonstrated by the following program window:



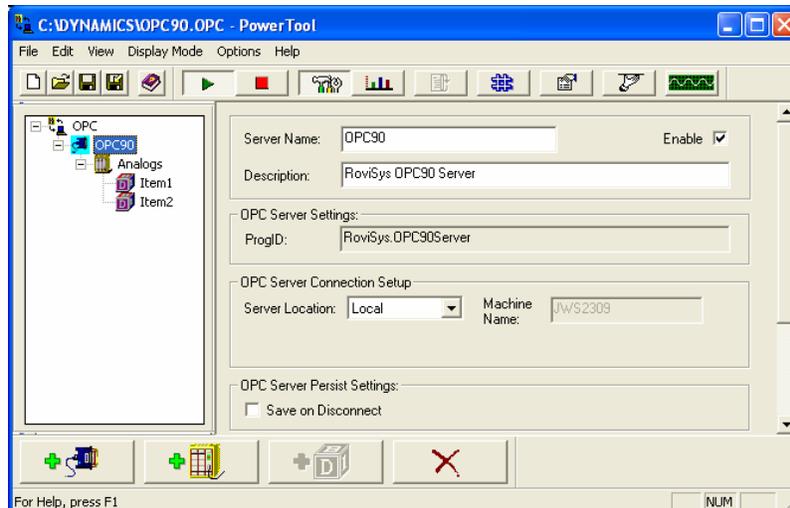
Step 2

To complete the remaining steps, iFIX must be started by running C:\Dynamics\FIX.exe.

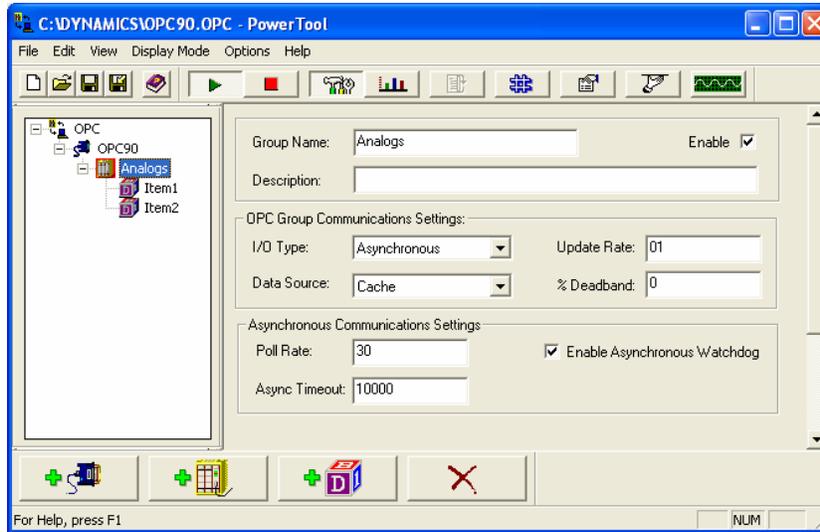


Step 3

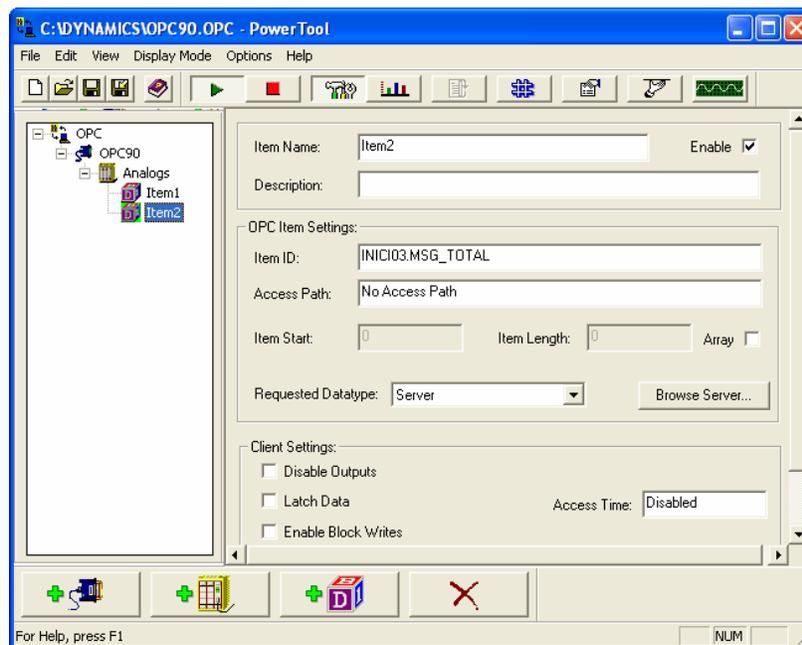
Startup the iFIX Power Tool by running C:\Dynamics\OPCDidw.exe or double clicking on Mission Control found in the iFIX workspace tree. Power Tool is used to configure the iFIX OPC Client driver access to OPC90 Server.

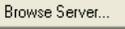


The above graphic shows the result of selecting Edit->Add Server (or click on the  button) to add the RoviSys.OPC90Server. Note that for this example the server name has been defined as OPC90 but it can be any name. Make sure the “Enable” checkbox is checked.



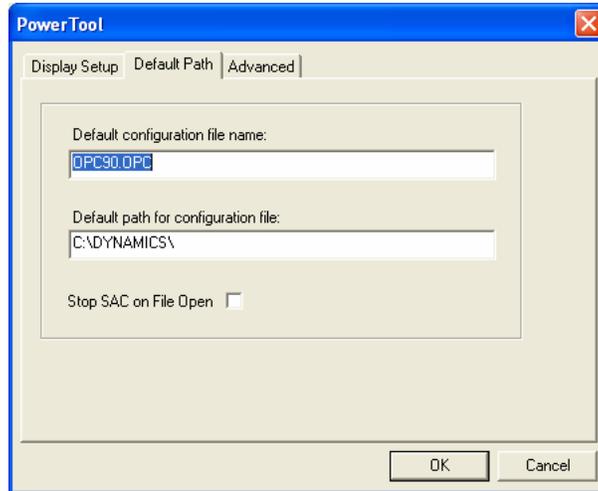
The above graphic shows the result of selecting Edit->Add Group (or click on the  button) to add a group. Groups can be logical collections of like points or all points can be configured under a single group. Make sure the “Enable” checkbox is checked.



The above graphic shows the result of selecting Edit->Add Item (or click on the  button) to add items to the group. Items define individual data values to be exchanged with OPC90. Use the  button to easily select OPC90 items by browsing its database. Make sure the “Enable” checkbox is checked.

After setting up the server, groups and items within the groups save the configuration. This example shows the configuration saved as “OPC90.OPC”.

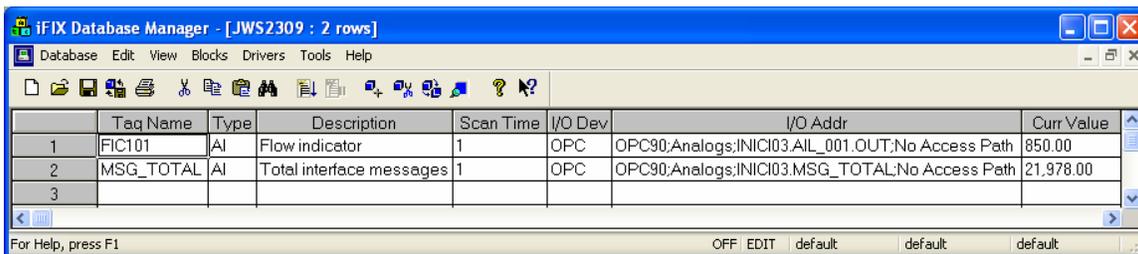
Before exiting the iFIX power tool, the saved configuration must be set as the default file that gets opened when the iFIX OPC Client driver starts. This is accomplished by selecting Options->Setup and then the “Default Path” tab as shown by the following graphic:



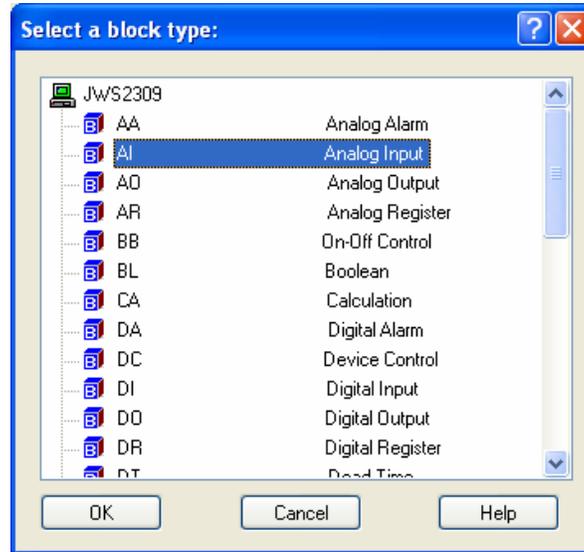
Type in the configuration file name (OPC90.OPC for this example) in the Default configuration file name field.

Step 4

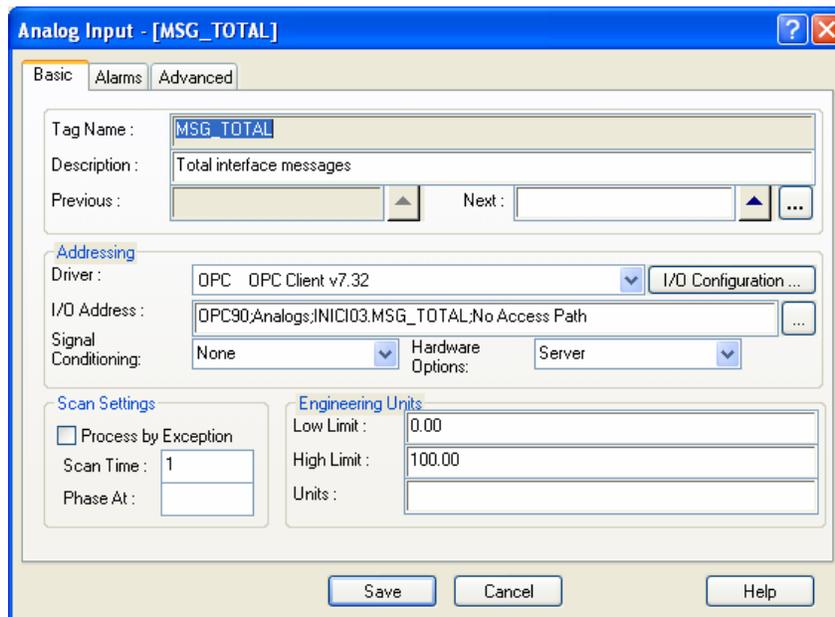
Startup the iFIX Database Manager by running C:\Dynamics\DataBaseManager.exe exe or double clicking on Database Manager found in the iFIX workspace tree. Database Manager is used to configure the iFIX database blocks that will be linked to graphics, trends and alarms. The data source for these blocks is set to the various iFIX OPC Client driver tags setup in the preceding step.



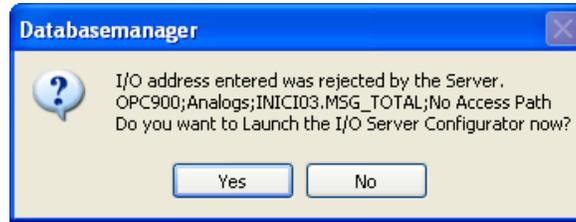
To add a new tag, double click in the next available blank cell under the Tag Name column and the following dialog is displayed:



OPC90 values are generally associated with iFIX AI, AO, DI and DO block types based on the type of value being associated with the block. Consider the MSG_TOTAL tag which for this example is associated with the OPC90 total message counter. The definition of this tag is an iFIX AI block configured as shown by the following dialog:



The source of the data is the iFIX OPC driver. The format of the I/O Address is "Server;Group;ItemID;AccessPath". So for this example, the Server is OPC90, the Group is Analog and the ItemID is INICI03.MSG_TOTAL which is the OPC90 Server device and tag. When the Save button is clicked, the I/O address will be validated with OPC90 and if ok, the save completed. Otherwise, a warning will be posted as shown by the following example:

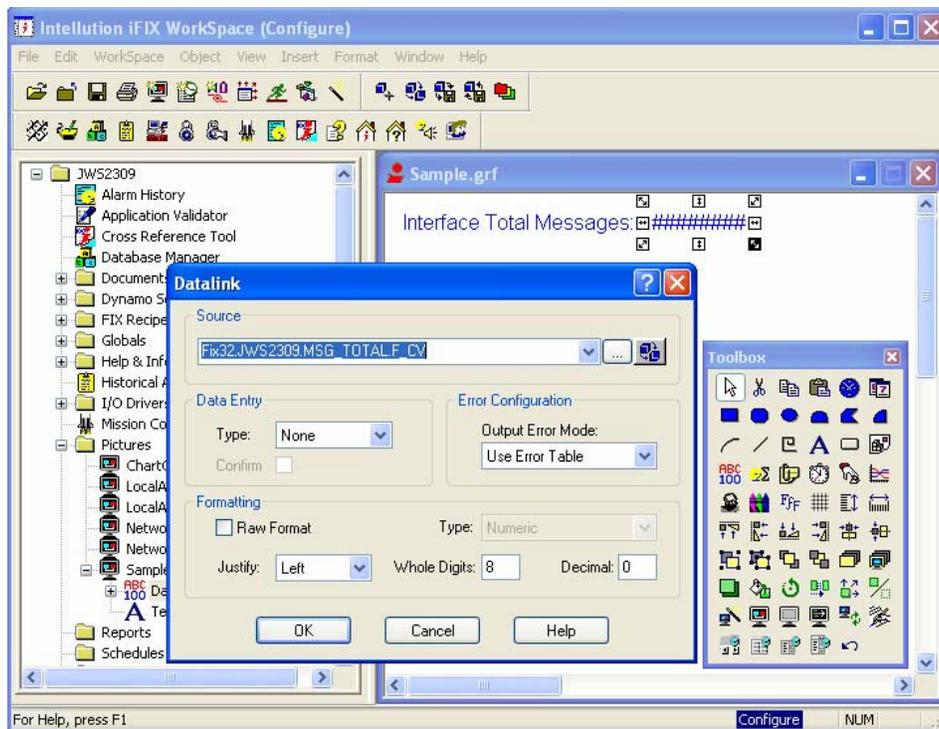


In this error, the Server was incorrectly specified as OPC900 instead of OPC90.

After configuring, the iFIX database blocks, make sure the database is saved before completing the last step.

Step 5

The last step is to add block values to iFIX graphic displays. The iFIX workspace display shown in step 2 has a picture called “Sample”. That example picture has a datalink defined to the iFIX tag called MSG_TOTAL that was defined in the preceding step. The definition of this datalink can be seen by the following graphic.



The source was filled in by clicking on the  button and drilling down to the current value field. Once the graphic is saved and the workspace switched to runtime the value is displayed as follows:



This completes the steps required to setup iFIX to access values from OPC90 Server. The information presented in this appendix has given the minimum instructions to get a single point setup. Consult the iFIX instructions for more detailed information on bulk configuration and the meaning of the various options shown within the various screen snapshots of each step.

