Using XLReporter with OPC DA

Overview

XLReporter takes process values directly from a PLC to a report without requiring a historian or database. This is accomplished by "report-as-you-run" technology that automatically populates a workbook, periodically or on event, without needing Excel. Completed reports are produced in workbook, PDF and web formats.

Data retrieval from a PLC uses an OPC Server. **XLReporter** has many connectors available for specific OPC DA servers. The following describes using **XLReporter** with any OPC DA server.

Prerequisites

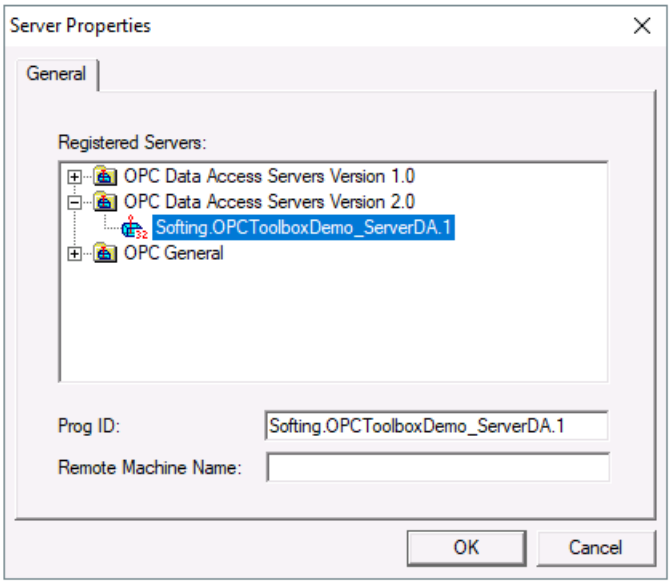
Verify Communication

Communication between the OPC server and an OPC client must be verified. Some OPC Server vendors like Kepware and Rockwell Automation provide OPC clients with their servers. These clients can be used to validate.

If an OPC client is not provided with the server, **XLReporter** provides an independent OPC client to verify connectivity and data retrieval from any OPC DA server. This client is found on **XLReporter's** product CD under **Tools, OPC, OPC_DA**. It can also be downloaded from www.SyTech.com.

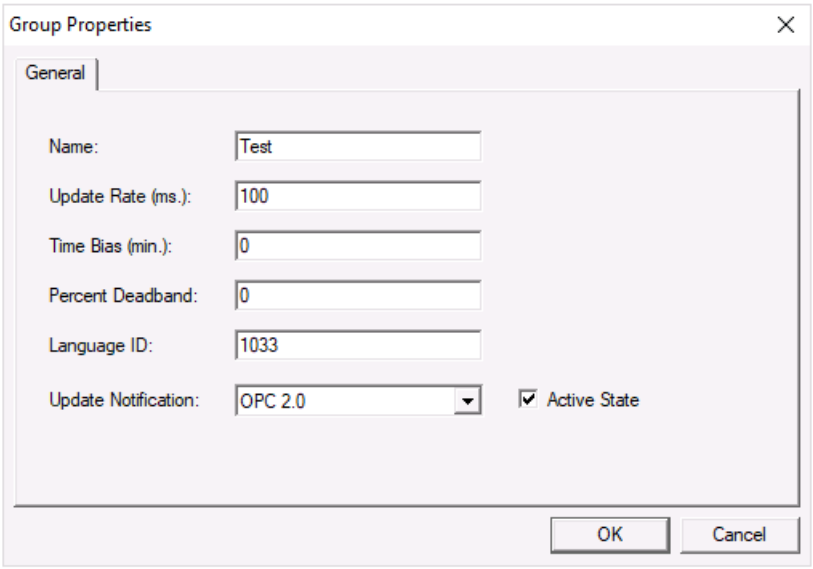
To run, double-click **SampleClientDA.exe**.

To connect to an OPC server, select **Edit**, **New Server Connection** to open the **Server Properties window**.



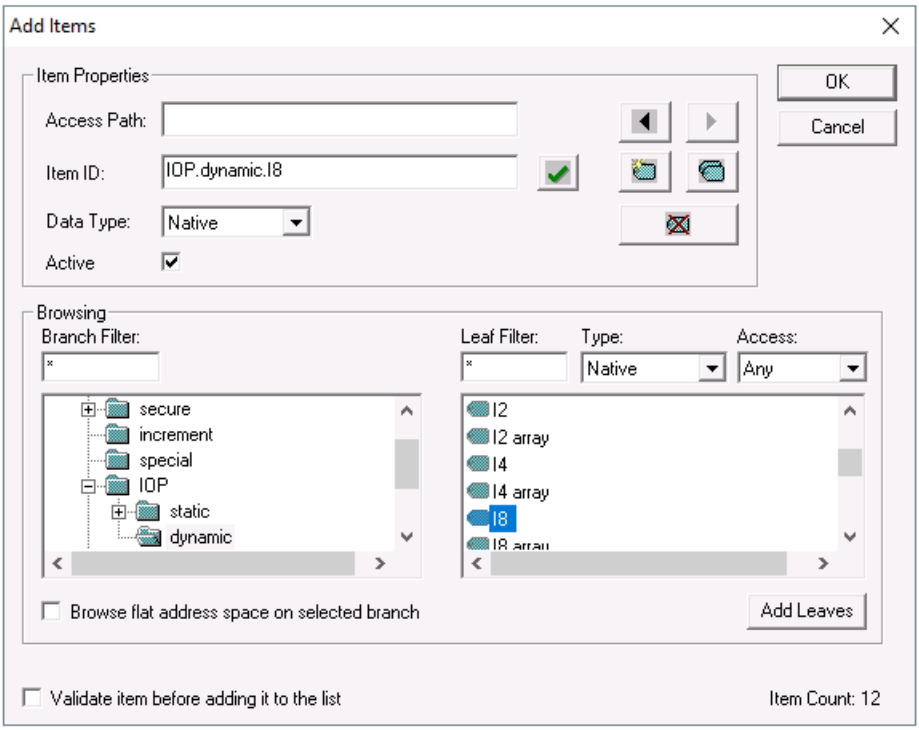
Expand the **OPC Data Access Servers Version 2.0**, select your OPC DA server and click **OK**.

From the **Edit** menu select **New Group**.

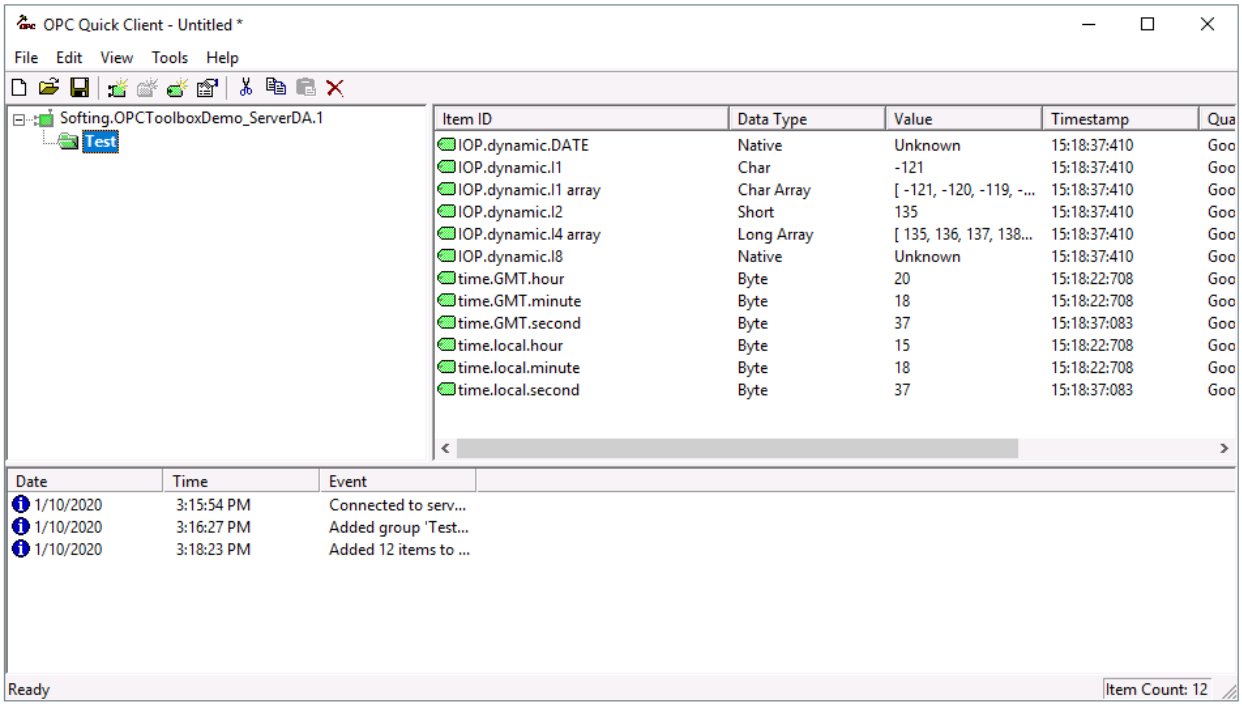


Specify **Name** and click **OK**.

Click on the group name created, and select **Edit**, **New Item**.



This opens the **Add Items** window. In the browsing section drill into the tree and select Leaf items on the right. For each leaf you want to view data for, click the Add Leaves button. Click **OK** when you have selected the tags to read.



All of the selected tags appear along with their real time values, type, quality, and timestamp.

If the client does not respond as described contact the OPC DA Server vendor technical support to troubleshoot and correct these issues.

OPC Core Components

If **XLReporter** is not installed on the same machine as the OPC DA Server, the **XLReporter** machine must have the OPC Core Components installed.

To determine if the core components are installed verify the following file exists:

- 64 - bit OS C:\Windows\SysWow64\OPCEnum.exe
- 32 - bit OS C:\Windows\system32\OPCEnum.exe

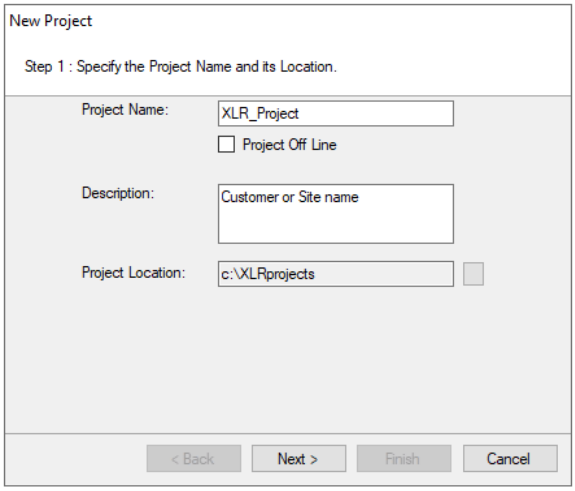
If the components are not installed then they are provided in the tools folder of the installation or from www.opcfoundation.org.

Create a Project

From the **XLReporter Project Explorer** select **File, New** to start the **Project Wizard**. This will give step-by-step instructions on creating a project

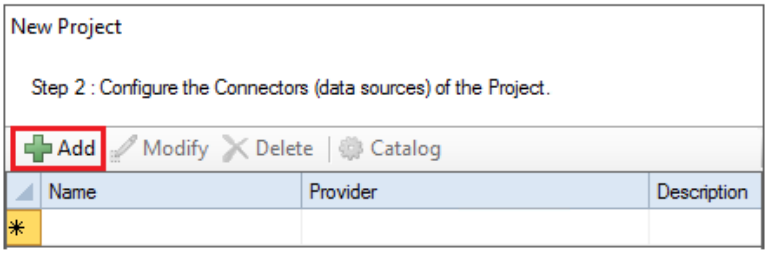
Step 1

- Enter a **Project Name** and **Description** (optional).

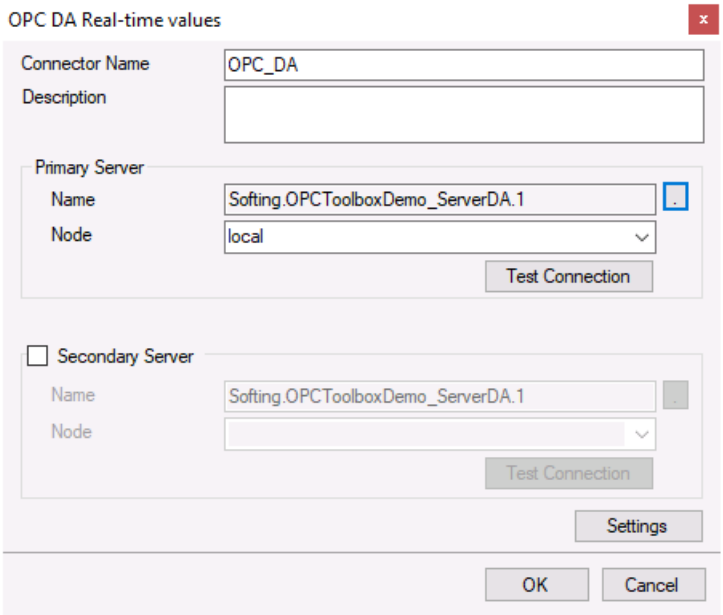


Step 2

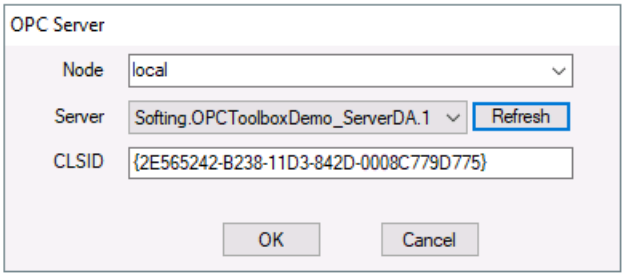
- Configure the data connector, click **Add**



Select **OPC, OPC DA Real-time values**



The connector requires a **Primary Server.** Click the browse pushbutton ([…]) for Name to select an available OPC DA Server.

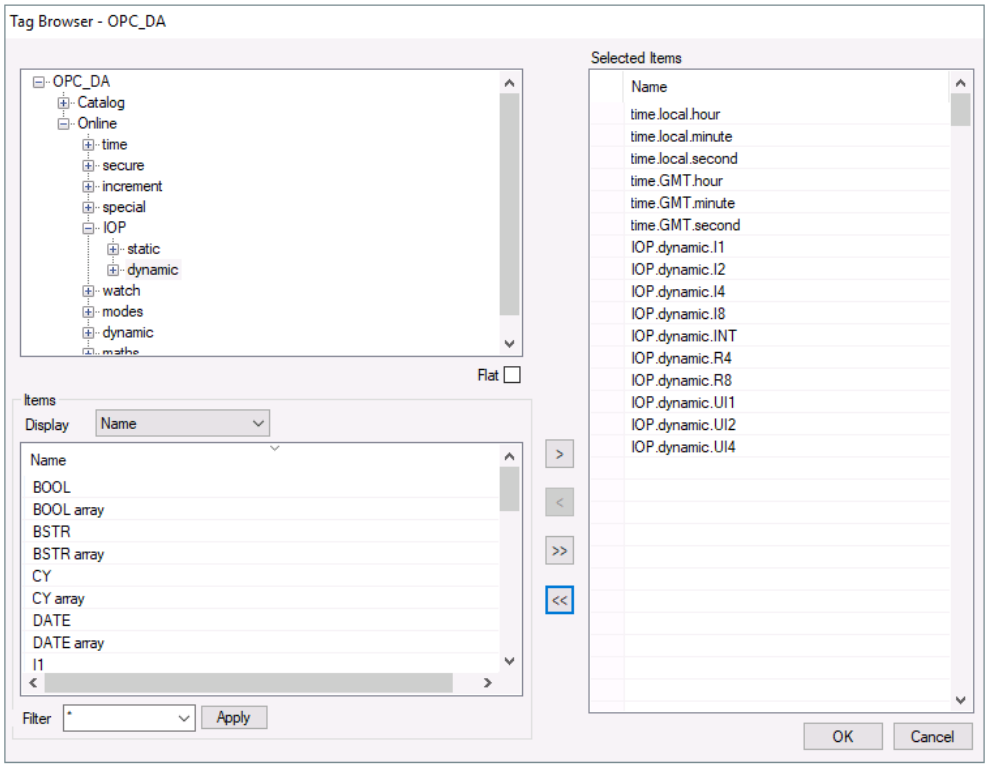


If the OPC DA Server is local to the machine, leave **Node** as *local* otherwise specify the computer name or IP address of the node where the OPC DA Server is running. Click **Refresh** to populate the Server list available from the **Node** and select the **Server**.

Verify Data Communication

To verify communication to the OPC DA Server, open the **Project Explorer** and select the **Tools** tab. Launch the **System Check** application.

- Click **Add**
- Choose the *OPC DA Server Connector* from the dropdown list,
- Click the pushbutton ([…]) next to Items to open the Tag Browser window.
- Select one or more tags, click **OK**



- Click **Start** to verify the communication