



Kepware Technologies

KEPServerEX Client Connectivity Guide for GE's CIMPLICITY

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Table of Contents

1.	Overview and Requirements	1
2.	Creating a New CIMPLICITY Project	1
3.	Checking the OPC Connection and Viewing Server Data	6
4.	Using Kepware’s OPC Quick Client	8

1. Overview and Requirements

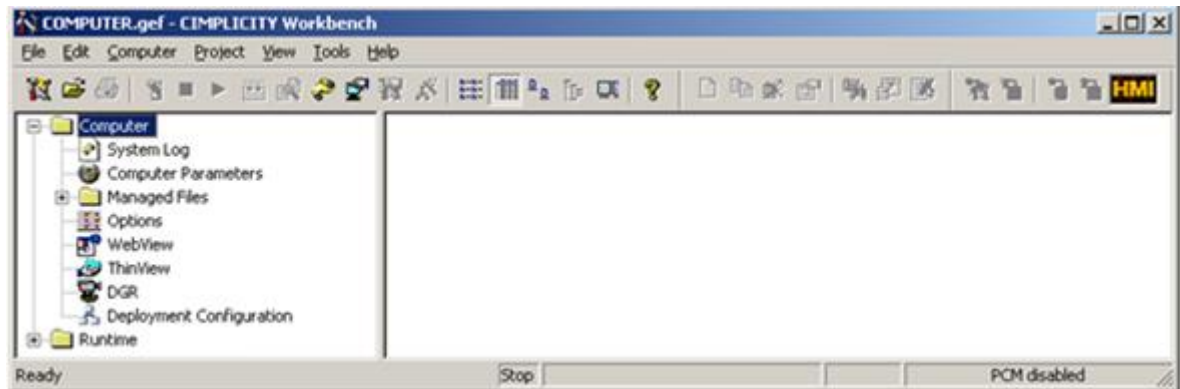
This guide demonstrates how to establish a connection between the KEPServerEX OPC server and GE's CIMPLICITY. Users must complete the following before continuing with the tutorial:

- Configure a server project. Select the appropriate driver and settings or run the **Simulation Driver Demo** included with KEPServerEX. The Simulation Driver Demo project is 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.

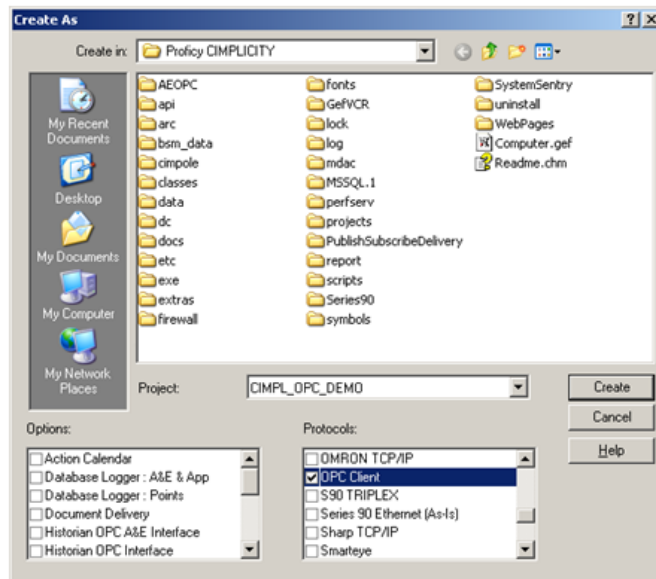
2. Creating a New CIMPLICITY Project

For this tutorial, GE's CIMPLICITY version 7.5 is used.

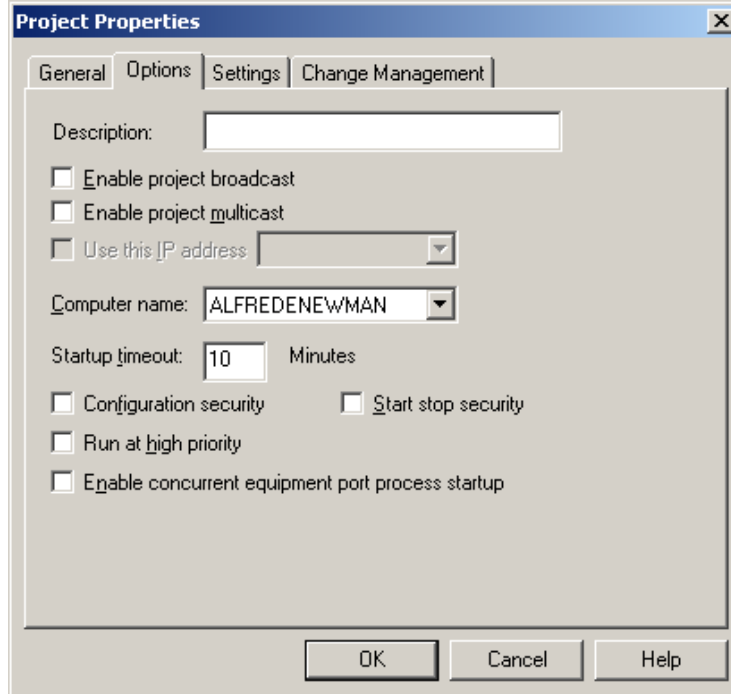
1. Start the **CIMPLICITY Workbench**, and then click **New Project**. Alternatively, click **File | New | Project**.



2. In **Create As**, enter a project name. For this tutorial, "CIMPL_OPC_DEMO" is used. Leave all **Options** unselected, but select **OPC Client** under **Protocols**. Once finished, click **Create**.



3. If planning on providing information from the project to the rest of the network, check **Enable Project Broadcast**; otherwise, click **OK**.

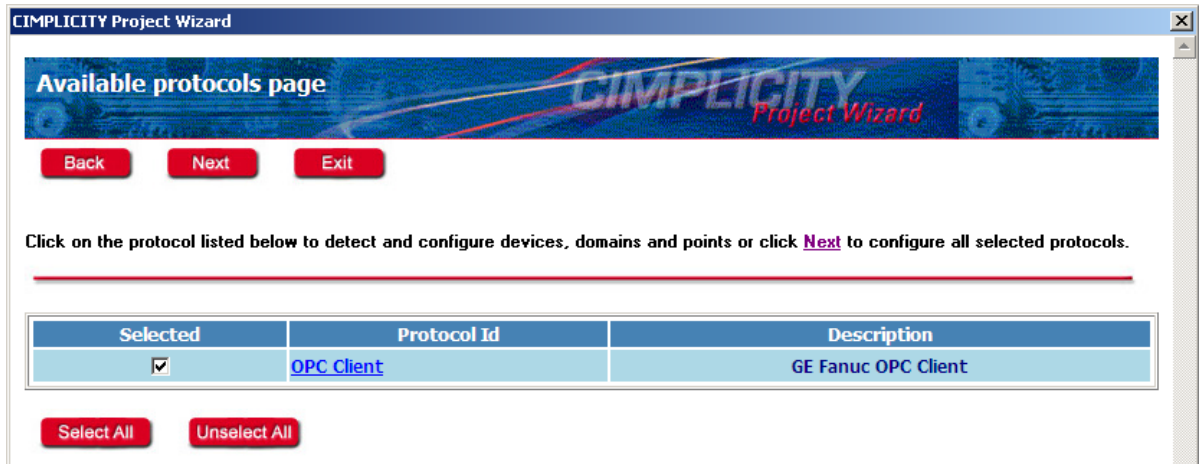


Note: CIMPLICITY's Project Wizard should start automatically. If it does not, click **Project | Project Wizard** to start it manually from the Workbench.

4. Click **Next**.



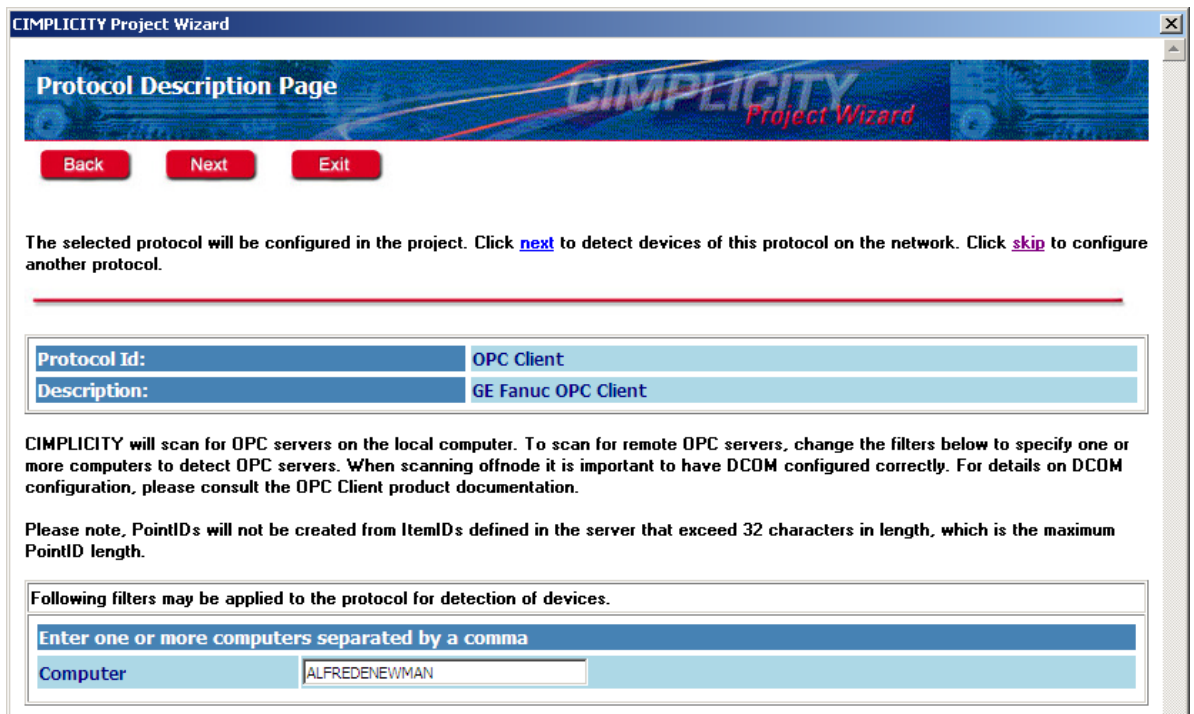
5. The **Available Protocols Page** lists all protocols included in the project. For this tutorial, only the OPC Client protocol is visible. To configure the OPC Client protocol, check **Selected** and click **Next**.



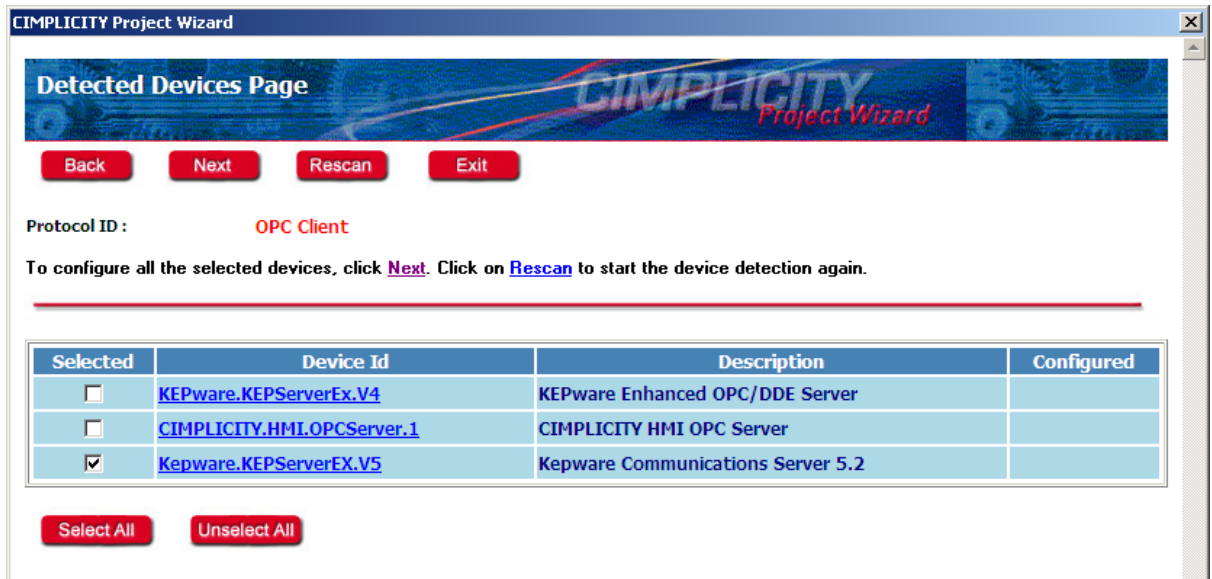
6. In **Protocol Description Page**, verify that the computer name appears in the list to be searched for valid devices. By default, the wizard sets its browse filter to the local PC for servers only. To search another PC, replace the local PC name with the remote PC name.

Note: Users attempting a remote connection to the server must configure DCOM. For more information, refer to [DCOM – Secure by Default](#).

7. Once finished, click **Next**.



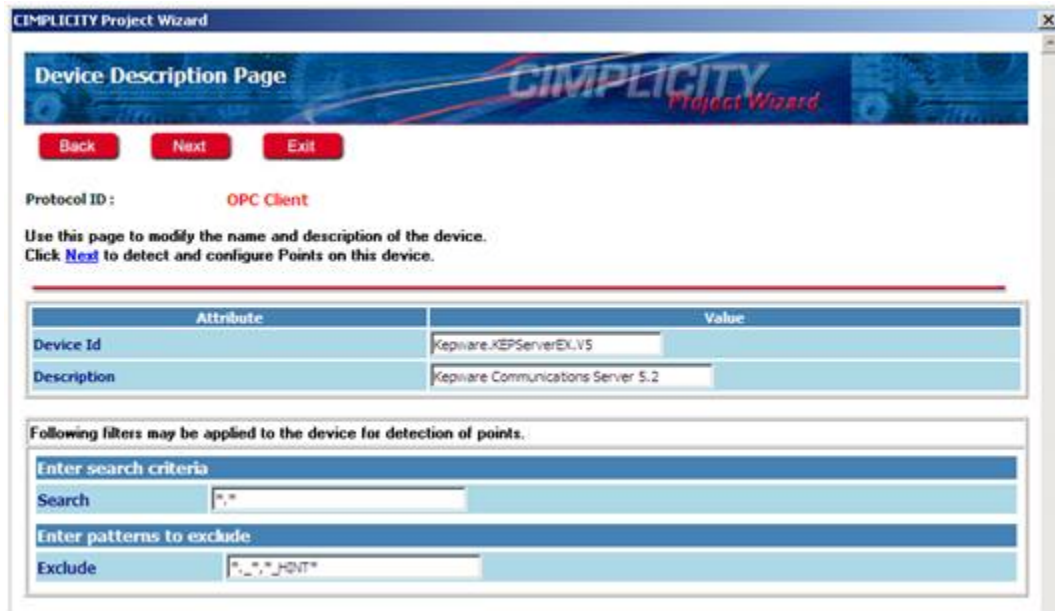
- The **Detected Devices Page** displays all installed and available OPC servers. Uncheck all servers except **KePware.KEPServerEX.V5** and click **Next**.



- In **Device Description Page**, verify that the correct server has been selected. Users can then edit the point/tag search criteria to exclude specific tags and groups of tags as desired.

Note: The Project Wizard excludes System Tags and Hints by default.

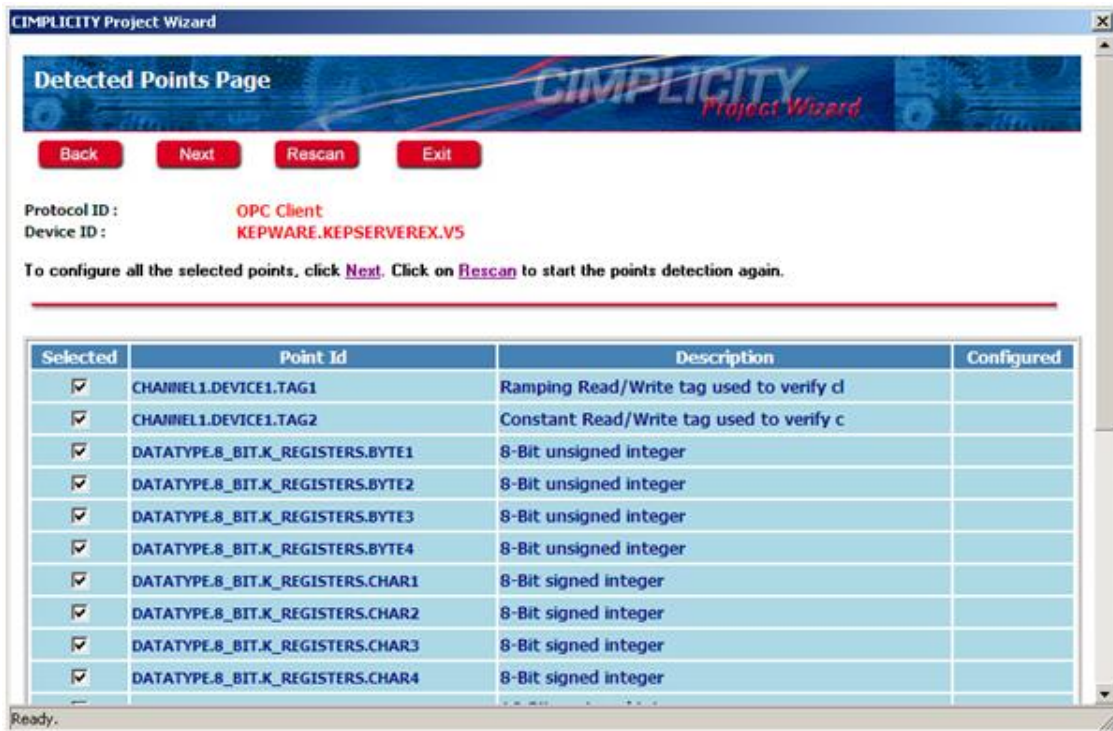
- Once finished, click **Next**.



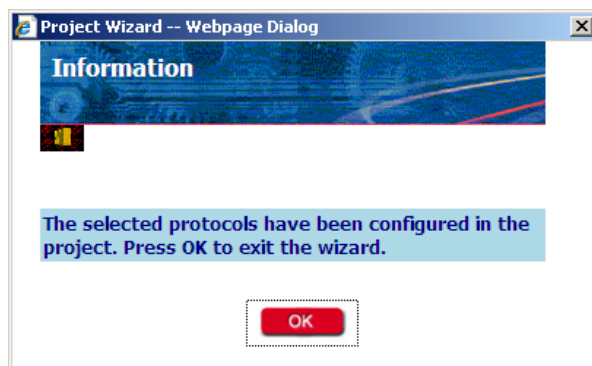
- The **Detected Points Page** displays all tags that satisfy the filter criteria. All points are selected by default. De-select any unwanted tags.

Note: If all of the desired tags are not displayed, return to the previous step. Re-evaluate the search and exclusion criteria before browsing the server again. Any new tags added to the server require that the Project Wizard be restarted and the server rescanned.

13. Once finished, click **Next**.



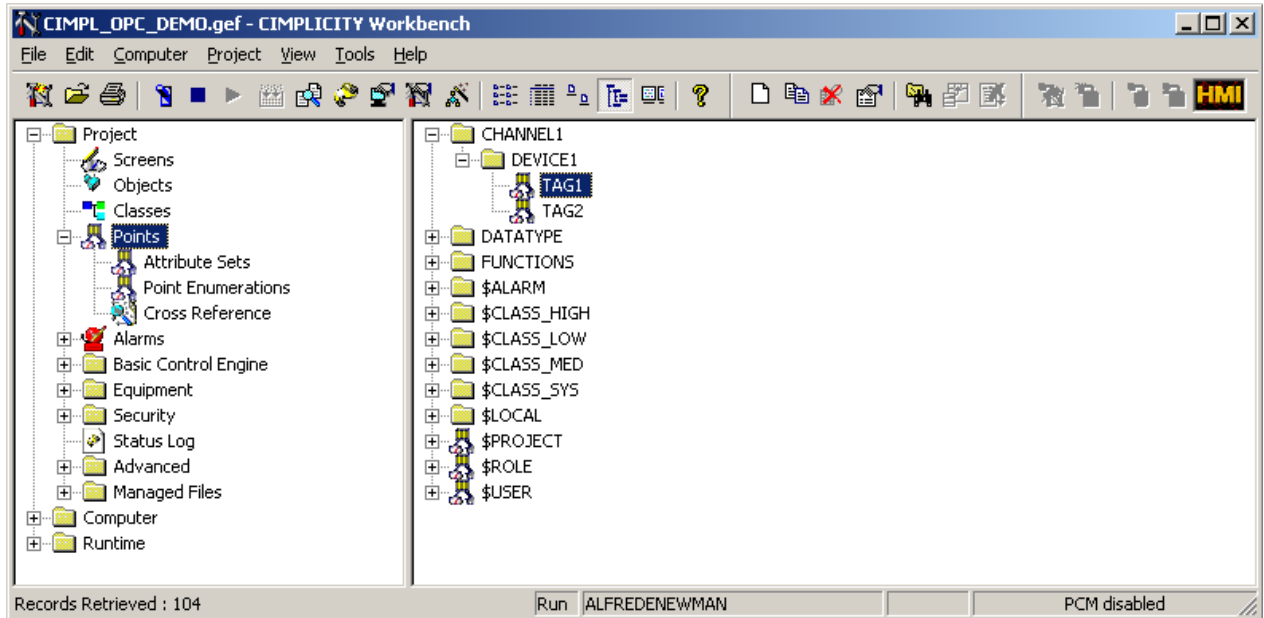
14. The **Information** dialog appears once the Project Wizard extracts the point data from the server and adds it to the project. Click **OK** to exit the wizard.



15. Next, click **OK**.



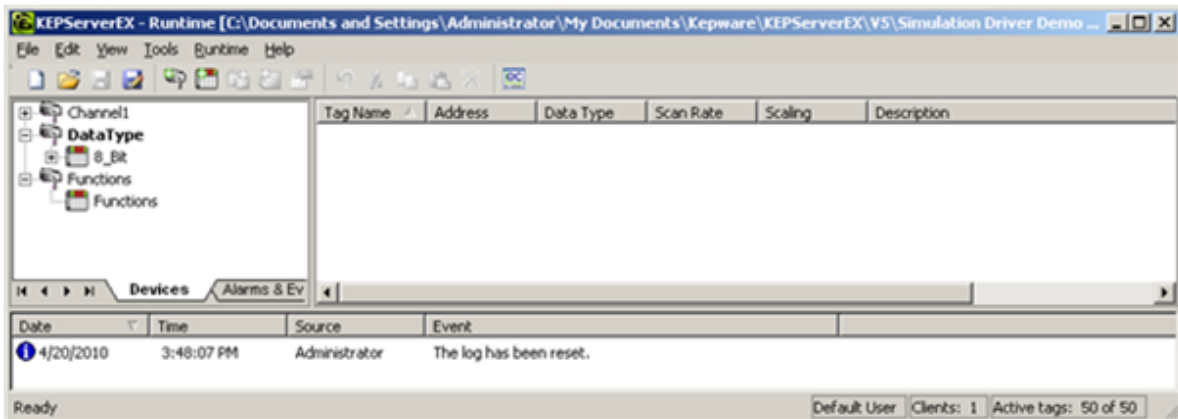
- In Workbench, select the **Points** icon. To display the newly added points, expand the folders in the right-hand pane under **Channel1 | Device1**. For a list view of tag information, click **View | Details**.



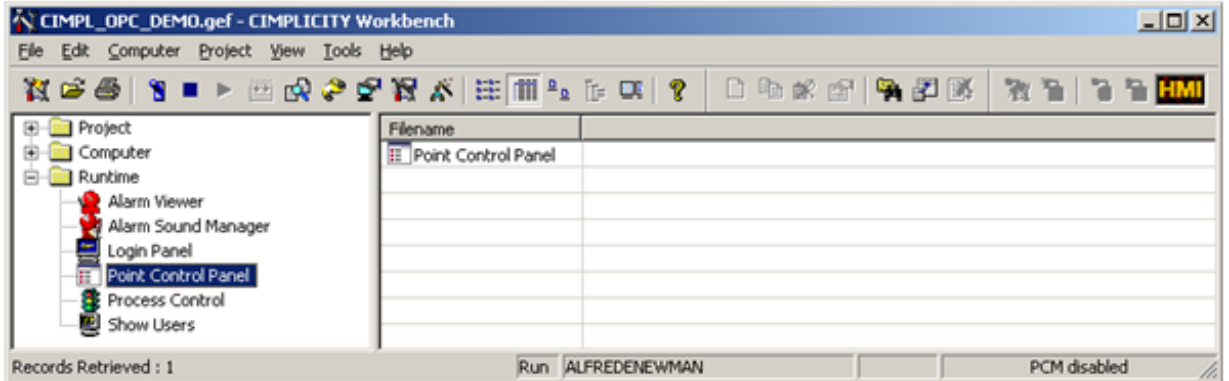
3. Checking the OPC Connection and Viewing Server Data

- In Workbench, start the CIMPLICITY project if it is not already running by clicking **Run**.
- Next, view KEPServerEX and then check the Connection Status bar (located at the bottom-right of the server interface). There should be at least one Client and 1 of 1 Active Tags. In this tutorial, there are 50 of 50 Active Tags because all available tags were selected.

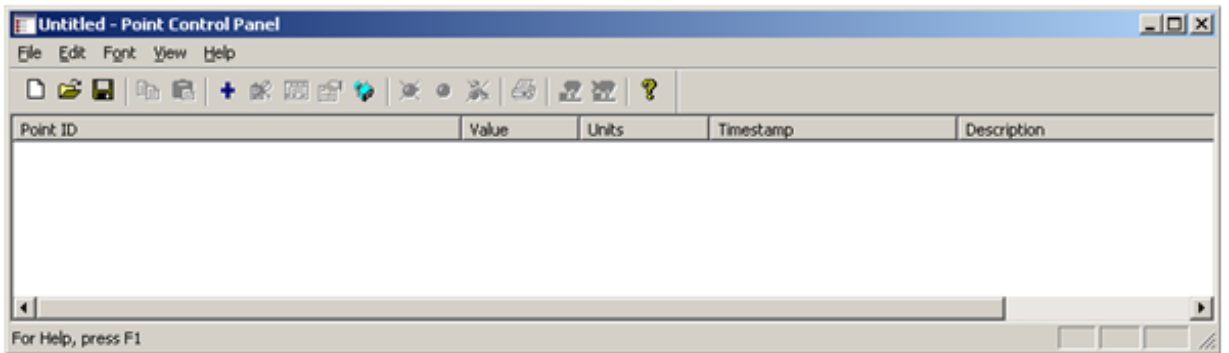
Note: If the Connection Status bar is blank, CIMPLICITY is not connected to the server.



- Return to the Workbench. In the project tree, expand the **Runtime** folder and double-click **Point Control Panel**.

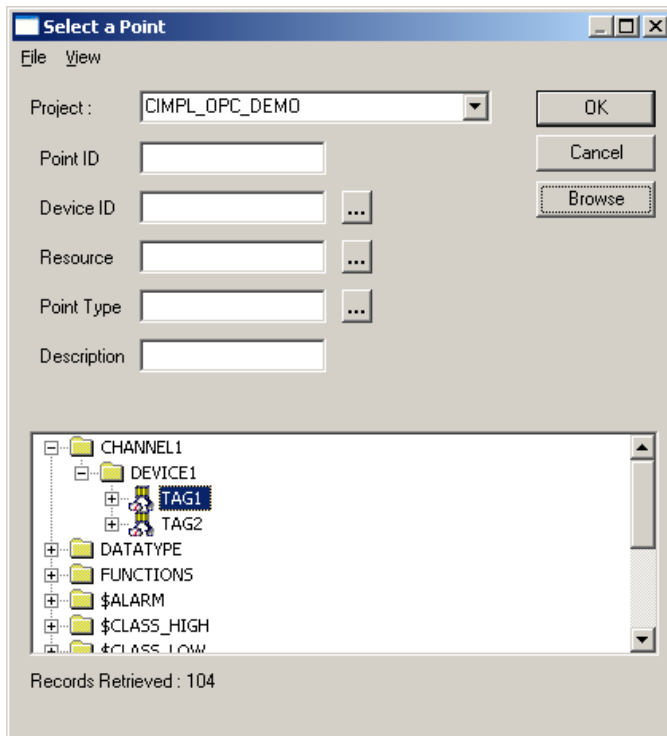


- In **Untitled-Point Control Panel**, select **Edit | Add Points**.

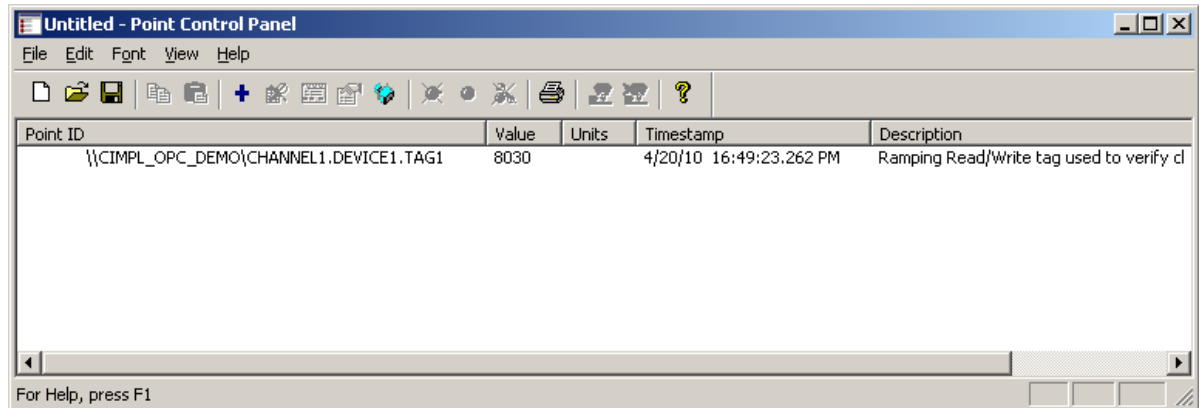


- In **Select a Point**, expand the branches of the tree and then select the desired points. Once finished, click **OK**.

Note: For this tutorial "TAG1" is chosen.



Note: The selected point should be displayed in **Untitled – Point Control Panel**. If Simulation Driver Demo was the server project used, "TAG1" should be exhibiting ramping data.



4. Using Kepware's OPC Quick Client

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