



# Connectivity Guide

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## KEPServerEX Connectivity Guide for GE CIMPLICITY

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# 1. Overview and Requirements

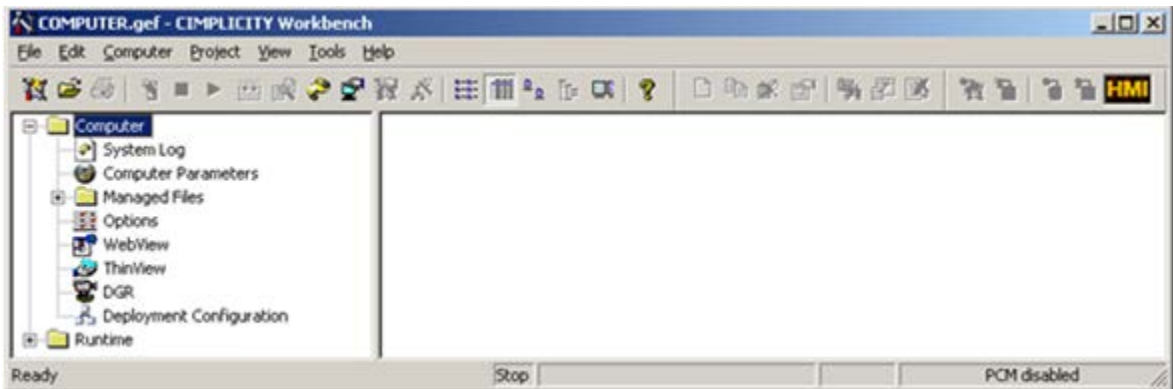
This guide demonstrates how to establish a connection between KEPServerEX® and GE CIMPLICITY®. This tutorial uses KEPServerEX V5. Complete the following requirements before continuing with tutorial:

- 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.

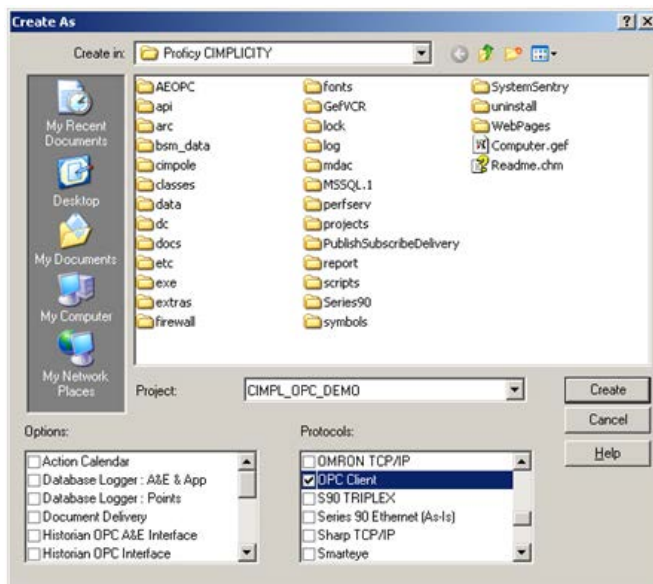
# 2. Creating a New CIMPLICITY Project

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

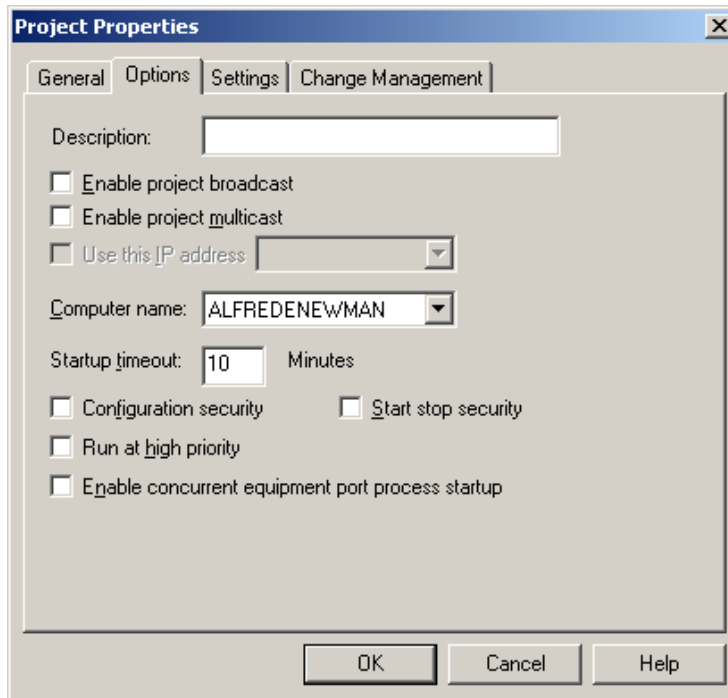
1. Start the **CIMPLICITY Workbench**, and then click **New Project**. Alternatively, click **File | New | Project**.



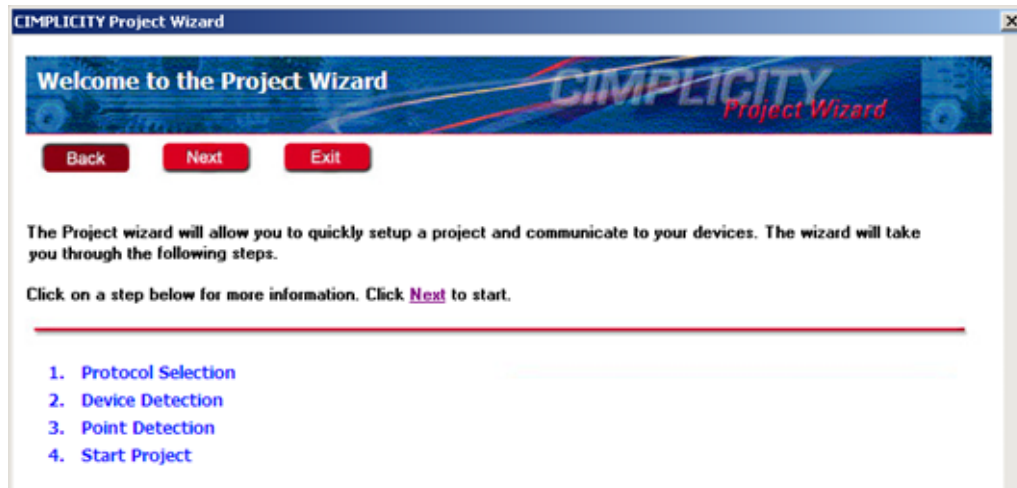
2. In **Create As**, enter a project name. For this tutorial, "CIMPL\_OPC\_DEMO" is used. Leave all **Options** unselected but select **OPC Client** under **Protocols**. Once finished, click **Create**.



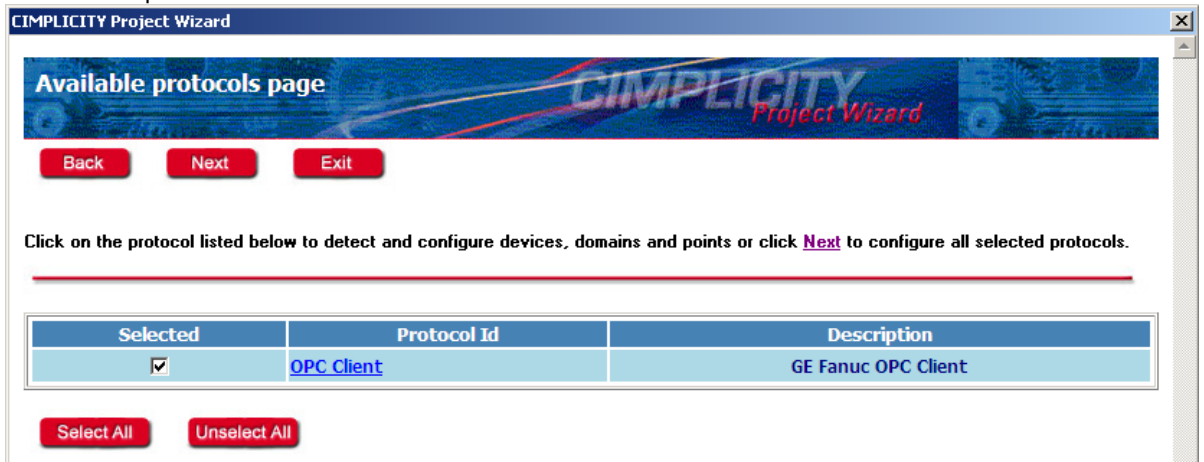
3. If planning on providing information from the project to the rest of the network, check **Enable Project Broadcast**; otherwise, click **OK**.



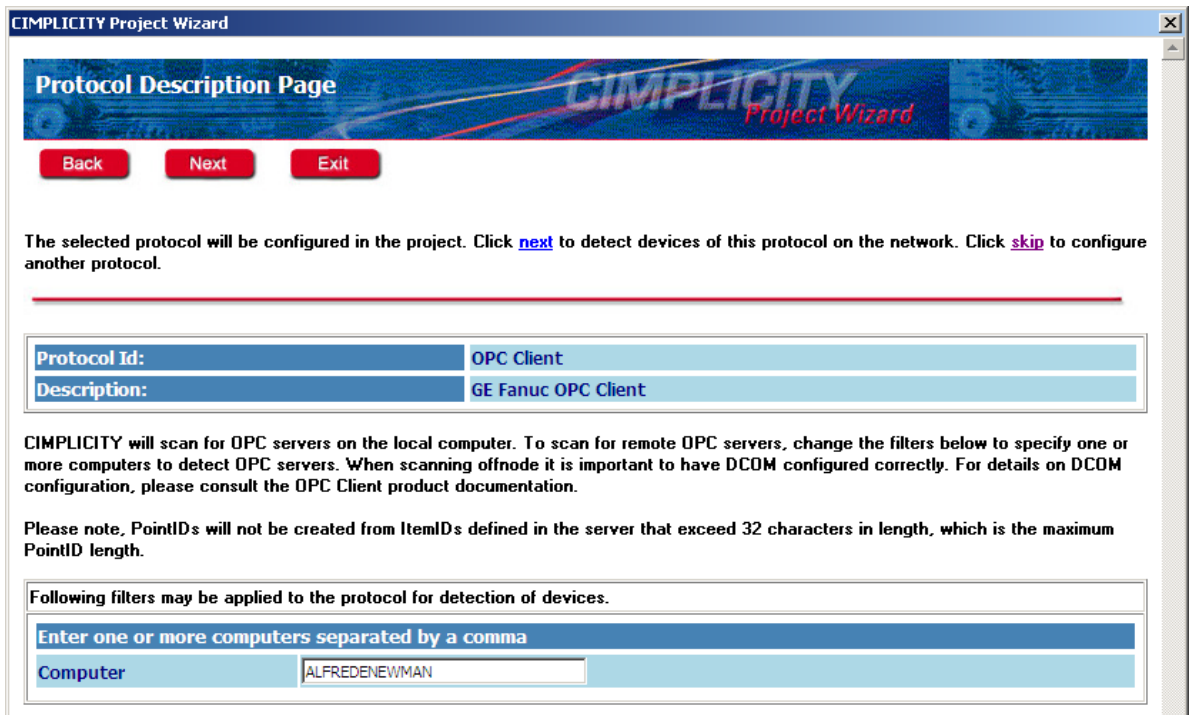
4. Click **Next** in the CIMPLICITY Project Wizard.



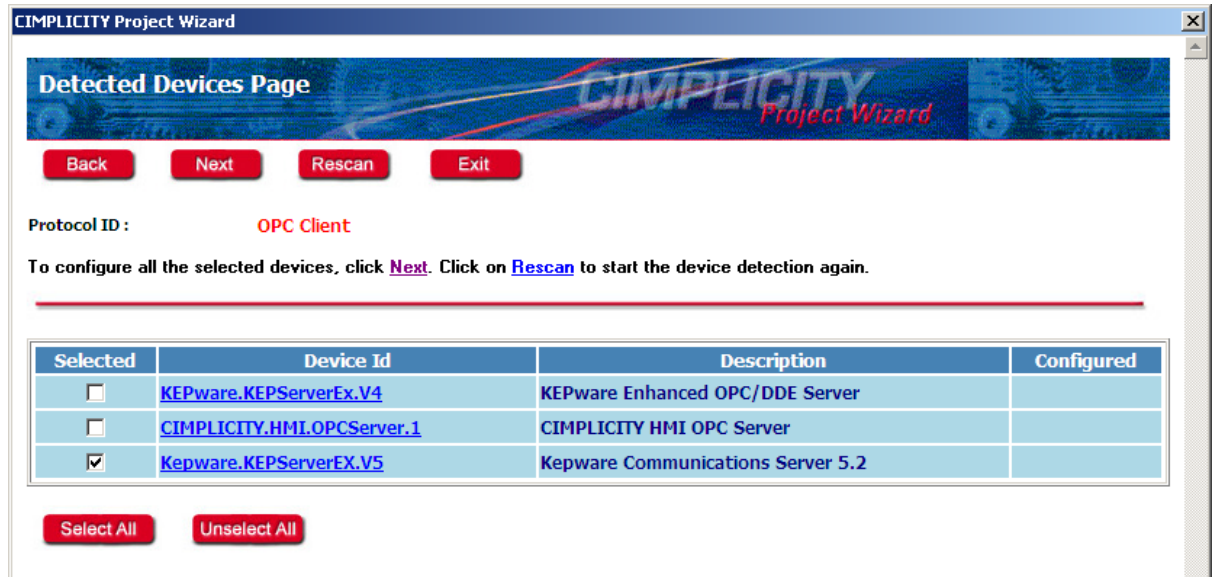
- The **Available Protocols Page** lists all protocols included in the project. Check **Selected** for the desired protocol and click **Next**.



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

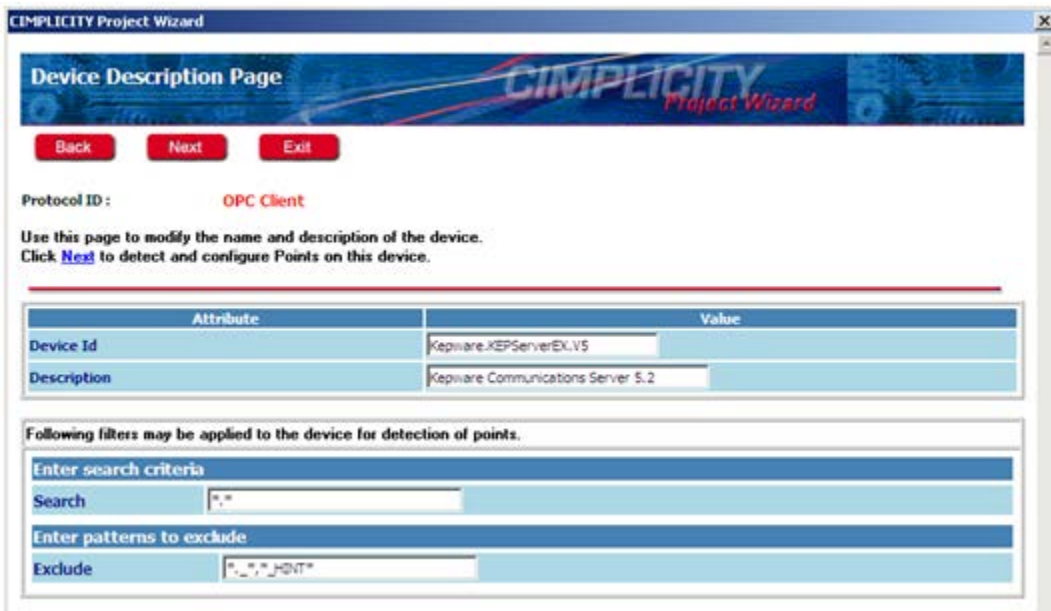


- The **Detected Devices Page** displays all installed and available OPC servers. Uncheck all servers except the desired Kepware **Device Id** and click **Next**.

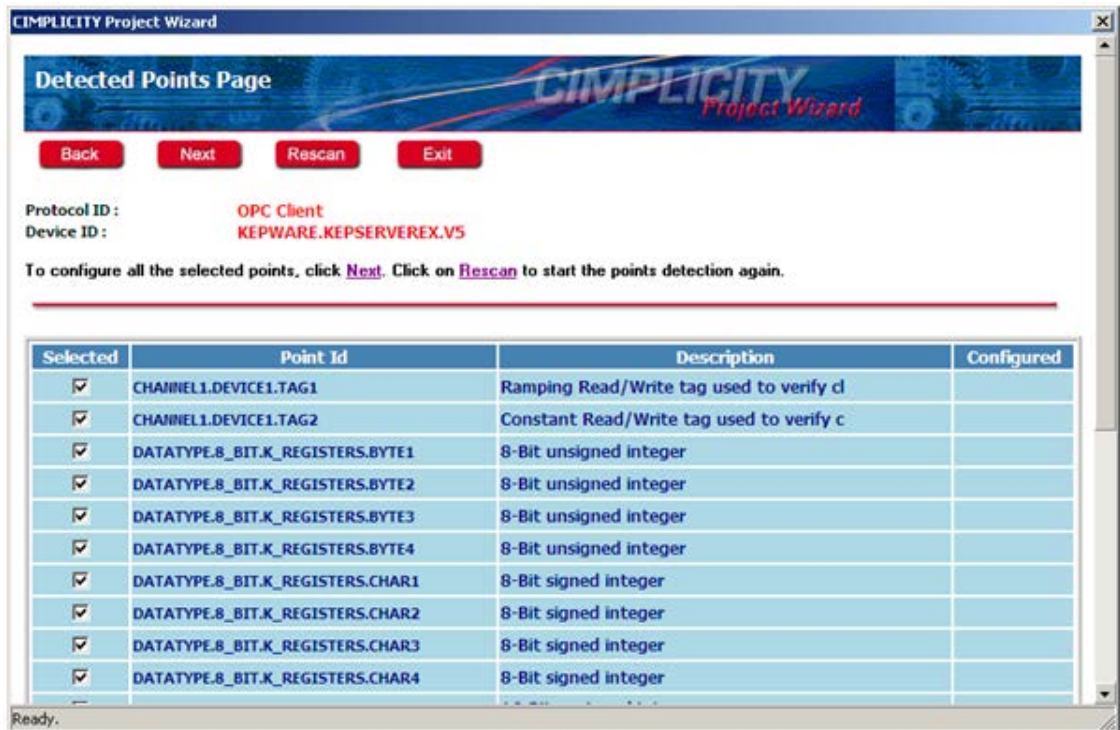


- In **Device Description Page**, verify that the correct server is selected. Now the point/tag search criteria can be edited to exclude specific tags and groups of tags as desired. Once finished, click **Next**.

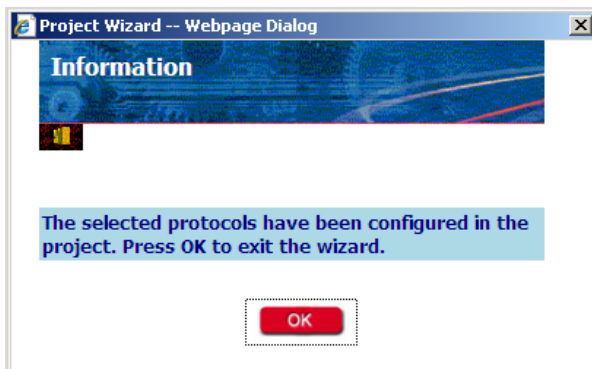
● **Note:** The Project Wizard excludes System Tags and Hints by default



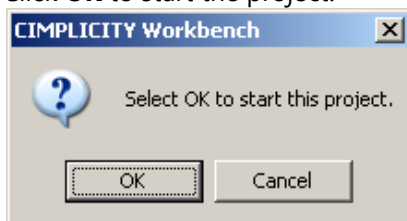
9. The **Detected Points Page** displays all tags that satisfy the filter criteria. All points are selected by default. De-select any unwanted tags. Once finished, click **Next**.
  - **Note:** If all the desired tags are not displayed, return to the previous step. Re-evaluate the search and exclusion criteria before browsing the server again. Any new tags added to the server require the Project Wizard to restart and the server rescanned.



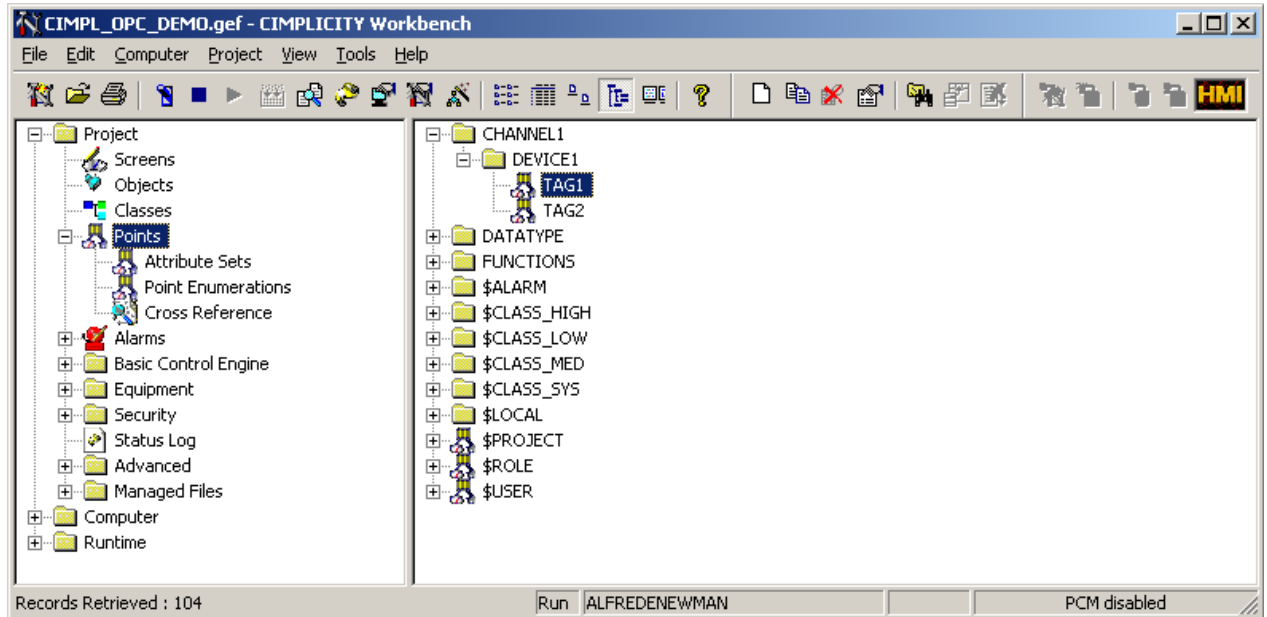
10. The **Information** dialog appears once the Project Wizard extracts the point data from the server and adds it to the project. Click **OK** to exit the wizard.



11. Click **OK** to start the project.



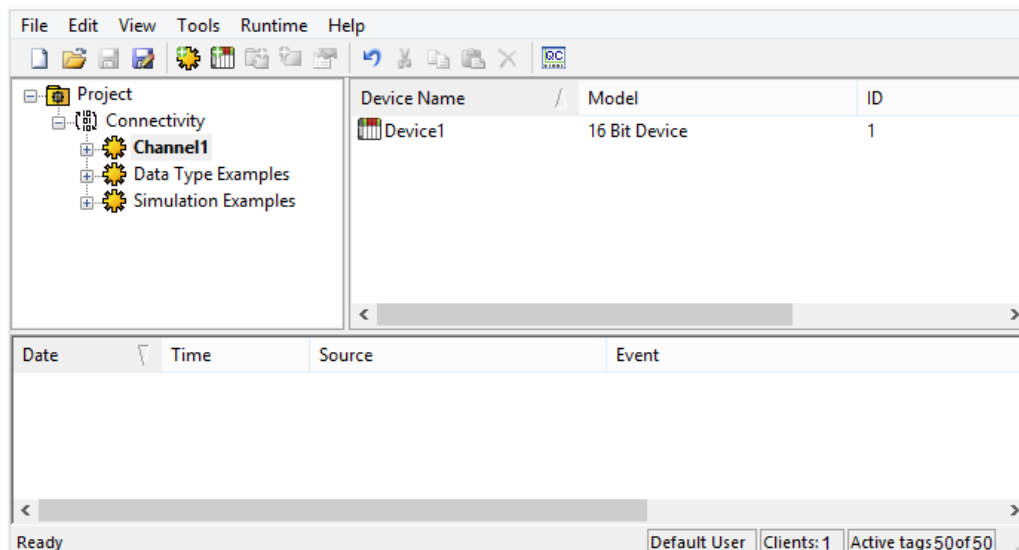
- In Workbench, select the **Points** icon. To display the newly added points, expand the folders in the right-hand pane under **Channel1 | Device1**. For a list view of tag information, click **View | Details**.



### 3. Checking the OPC Connection and Viewing Server Data

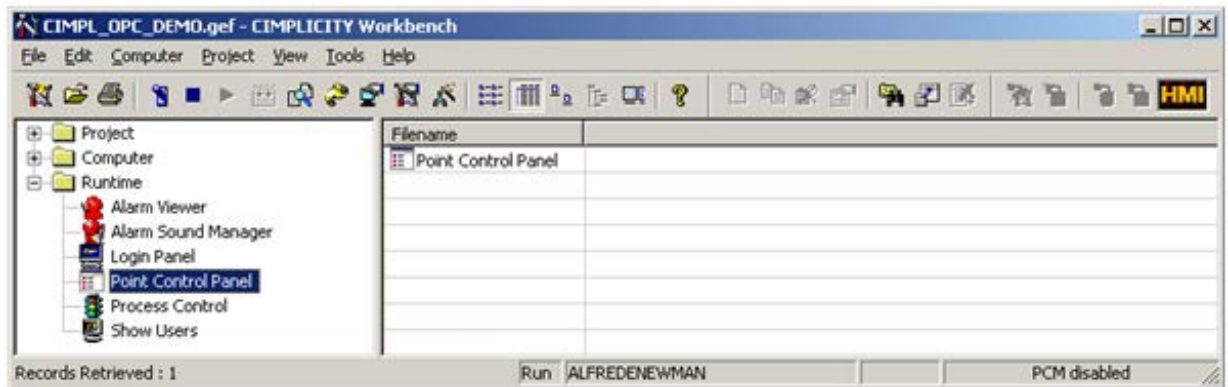
- In Workbench, start the CIMPLICITY project if it is not already running by clicking **Run**.
- Access KEPServerEX and check the Connection Status bar (located at the bottom-right of the server interface). There should be at least one Client and 1 of 1 Active Tags. In this tutorial, there are 50 of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

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

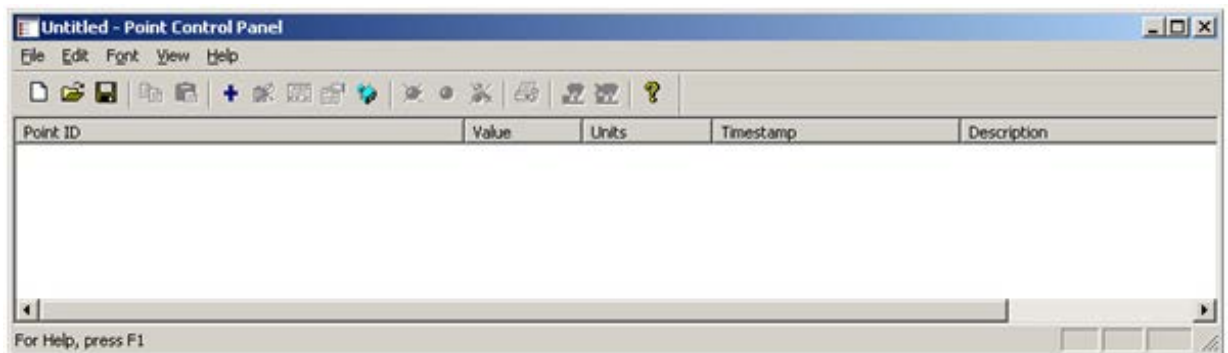




- Return to the Workbench. In the project tree, expand the **Runtime** folder and double-click **Point Control Panel**.

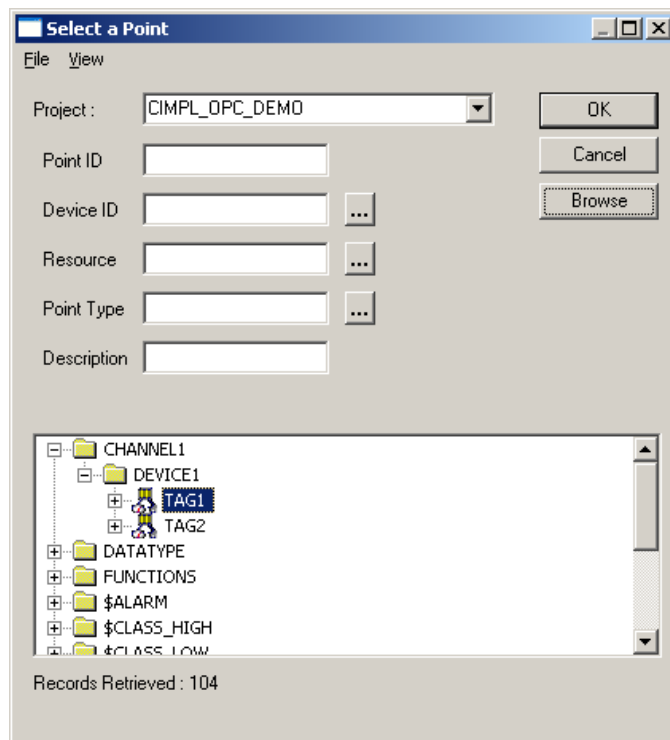


- In Untitled-Point Control Panel, select **Edit | Add Points**.



- 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.

Point ID	Value	Units	Timestamp	Description
\\CIMPL_OPC_DEMO\\CHANNEL1.DEVICE1.TAG1	8030		4/20/10 16:49:23.262 PM	Ramping Read/Write tag used to verify cl

## 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 manual](#).