



Connectivity Guide

Kepware's OPC Quick Client

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1. Overview and Requirements

This guide will demonstrate how to establish a connection between the KEPServerEX OPC server and Kepware's OPC Quick Client. Users must complete the following before continuing with the tutorial:

- Configure a server project. 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 this 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.

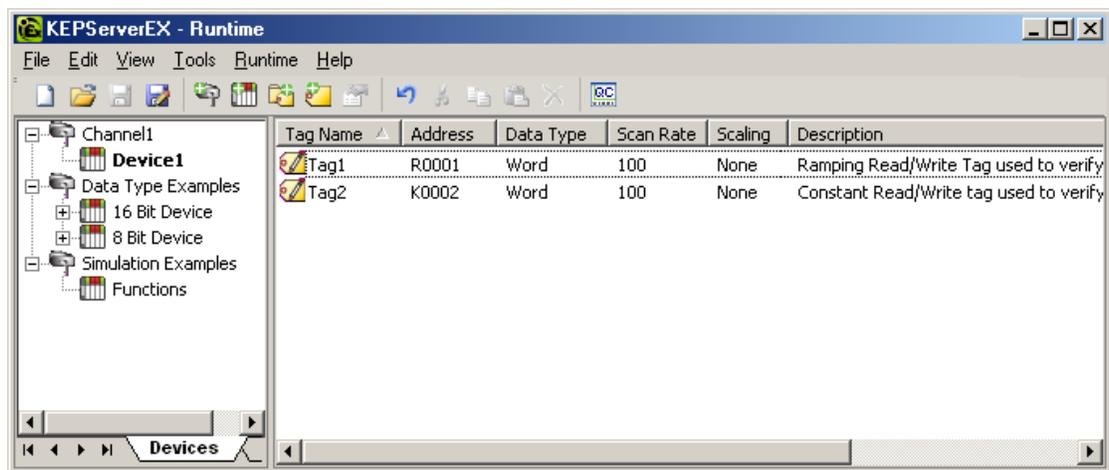
2. Connecting to KEPServerEX from the OPC Quick Client

Kepware's OPC Quick Client is a simple client application used for testing device communications, OPC connectivity, and troubleshooting. It is not intended to be used for production.

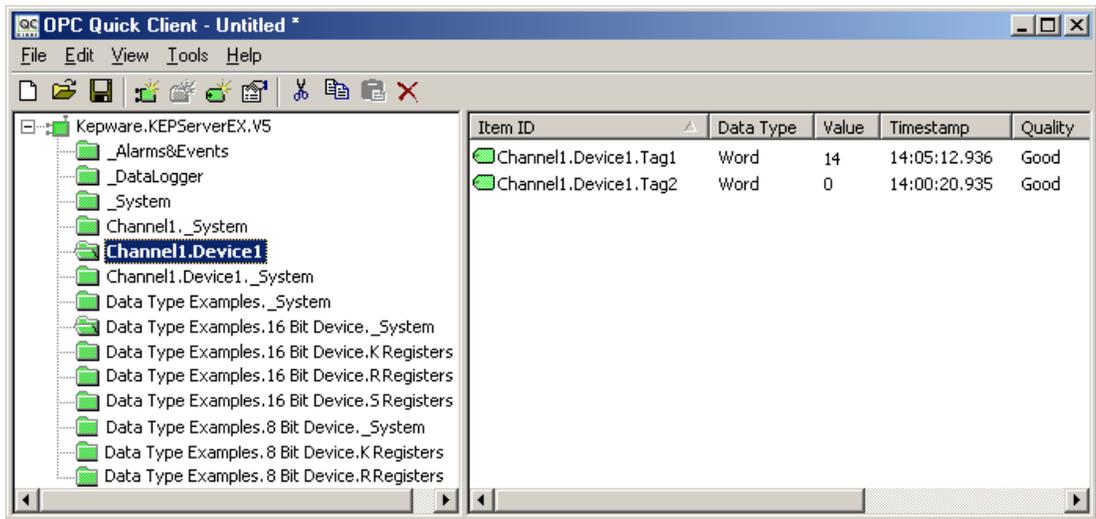
2.1 Launching the OPC Quick Client

In most cases, an OPC Quick Client user wants to make sure that all the tags defined in the server are being polled and reported properly. The OPC Quick Client can be launched directly from the server, and can automatically generate the client project from the configured server project. For more information, refer to the instructions below.

1. In the server, add all of the desired tags.
2. Then, click the **Launch** icon  located in the toolbar. Alternatively, click **Tools | Launch OPC Quick Client**.



- **Note:** Upon launch, the client project will display the tags in the first tag group (which is usually a server system group).
3. To display the status being reported by the OPC server, select the group for a device that contains tags.



2.2 Creating a New OPC Quick Client Project

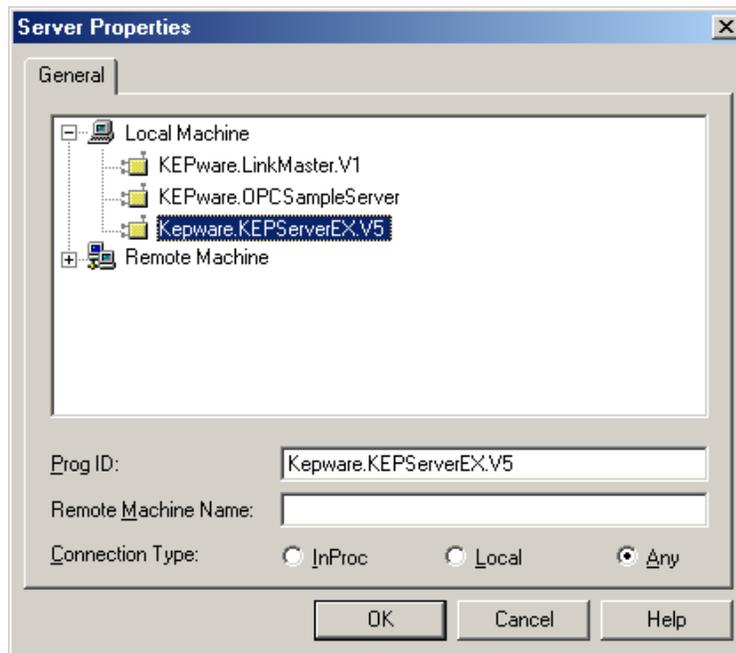
1. To create a new project, click the **New Server** icon  located in the toolbar. Alternatively, click **Edit | New Server Connection....**



2.2.1 Browsing for KEPServerEX on a Local Machine

For more information, refer to the instructions below.

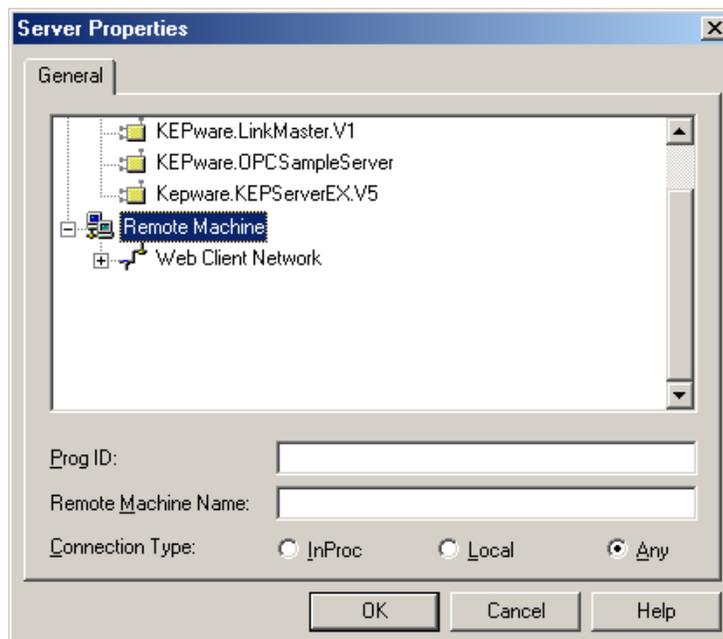
1. In the **General** tab of **Server Properties**, expand **Local Machine** for a list of locally-installed servers.
2. Browse to and select the server desired for connection.
 - **Note:** The server's Program ID will be displayed in **Prog ID**.
3. Click **OK** to connect.



2.2.2 Browsing for KEPServerEX on a Remote Machine

For more information, refer to the instructions below.

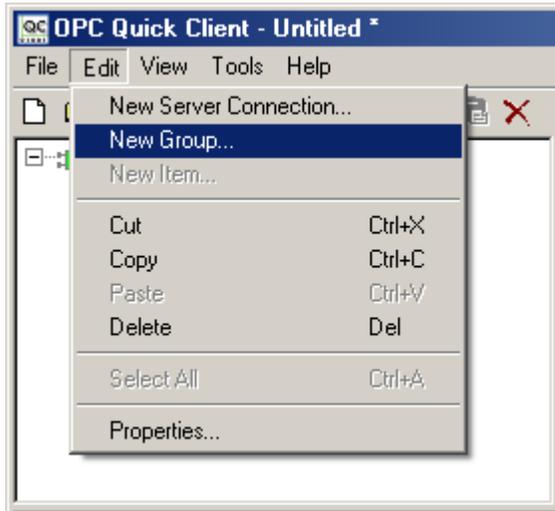
1. In the **General** tab of **Server Properties**, expand **Remote Machines** for a list of remote machines.
2. Browse to and select the PC on which the server is running. Then, select the server desired for connection.
3. In **Remote Machine Name**, enter the name of the remote PC or its IP address.
4. In **Prog ID**, enter the Program ID of the OPC Server.
5. Click **OK** to connect.



2.2.3 Adding a Tag or Item Group

Once the server has been selected, a visual representation of the client connection will be displayed in the OPC Quick Client. In OPC DA, the client controls how data will be acquired from the devices through the use of an OPC group.

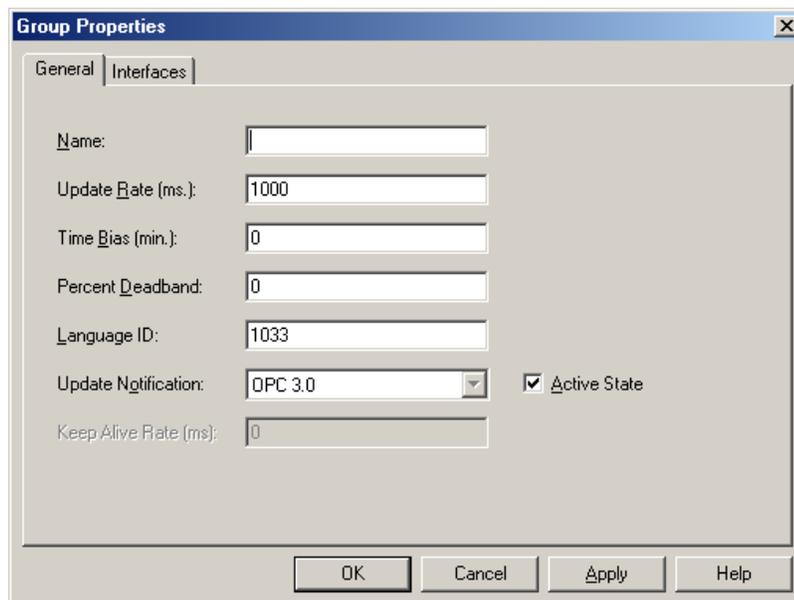
To add an OPC group, click the **New Group** icon  located in the toolbar. Alternatively, click **Edit | New Group....**



2.2.4 Configuring Group Properties

In Group Properties, make the following changes:

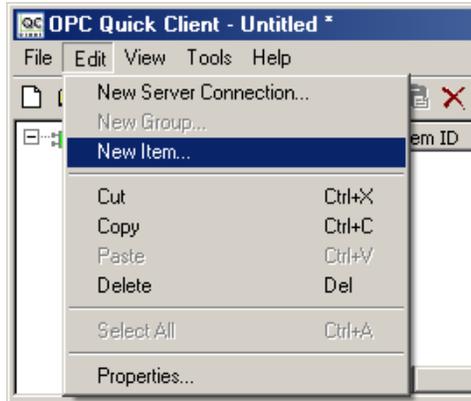
1. In **Name**, enter a unique name in order to identify the group. If the field is left blank, the server will generate a unique name.
2. Next, enable the **Active State** checkbox so that the client may display active items for the group.
3. Once finished, click **OK**.



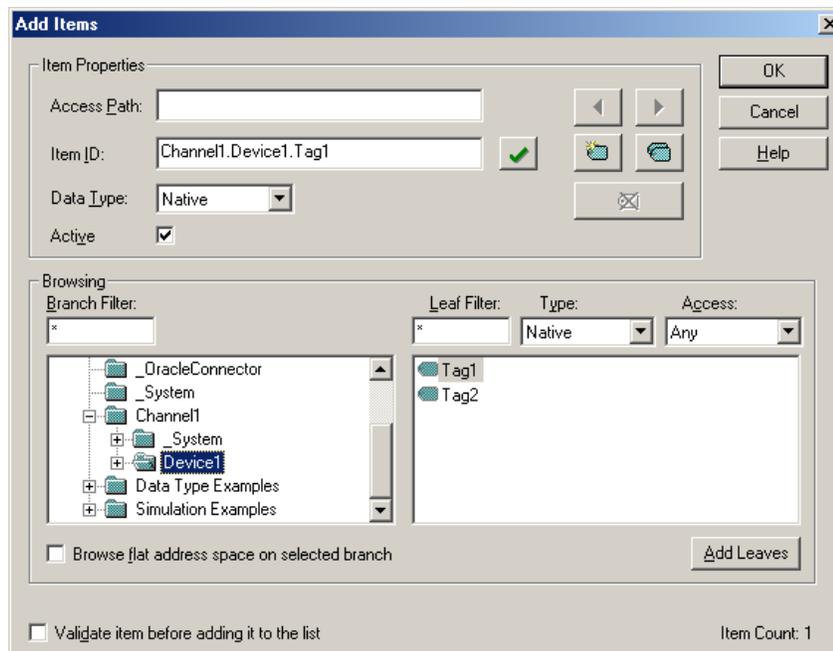
2.2.5 Adding Tags and Items

Once a group has been created, items can be added.

1. To add an item, click the **New Item** icon  located in the toolbar. Alternatively, click **Edit | New Item**.



2. Beneath **Browsing**, select the device or group from which the address items or tags will be selected.
3. Next, double-click on an item to open its properties.
 - **Note:** In this example, "Tag1" in "Device1" on "Channel1" has been selected. These items have already been created in the server demo project.
4. To add an address manually, type the fully-qualified item address in **Item ID**. For example, to dynamically add address "R100" and an item to "Channel1.Device1," type "Channel1.Device1.R100."
5. To select multiple items at once, select a tag in the browser and then click **Add Leaves**.
6. Once all the items have been selected, click **OK**.



2.3 Checking the OPC Connection

To verify that the client is receiving data from the server, check that the data quality is being displayed as "Good."

- **Note:** For the Simulator project, the data value for "Tag1" should be changing at a one second interval.

