



Kepware Technologies

Client Connectivity Guide for Intellution's Fix Dynamics and OPC PowerTool

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1. Overview

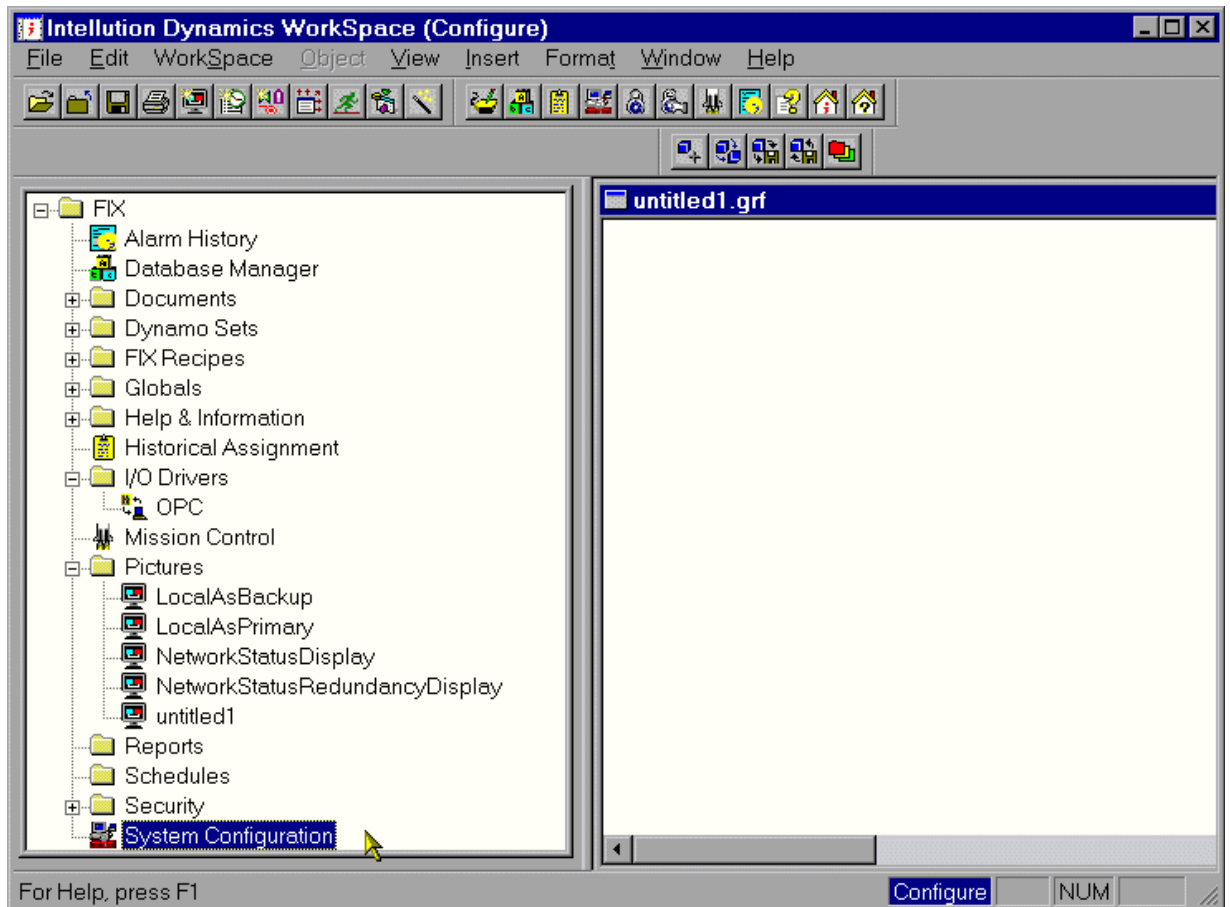
This document intends to discuss how to use Intellution's Fix Dynamics and OPC PowerTool to create an OPC connection to the server.

Note: Although Fix Dynamics will run on any 32-bit operating system, OPC PowerTool must be used on a Windows NT-based platform.

2. Using Intellution's Fix Dynamics ® and OPC PowerTool® as OPC Clients

2.1 Creating a New Dynamics Project

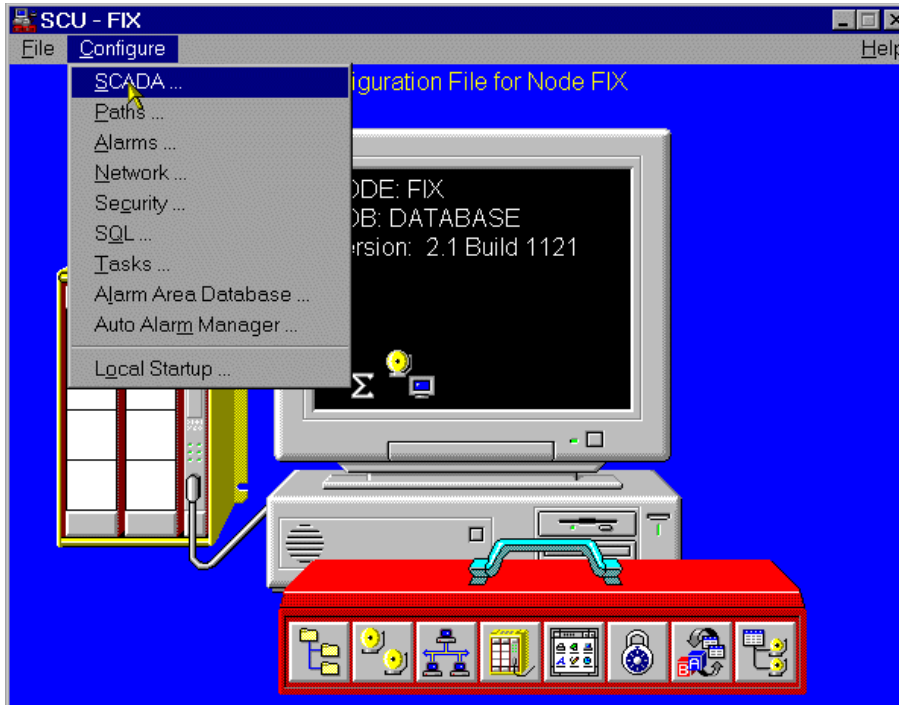
1. To start, open **Dynamics** and then create a new project.



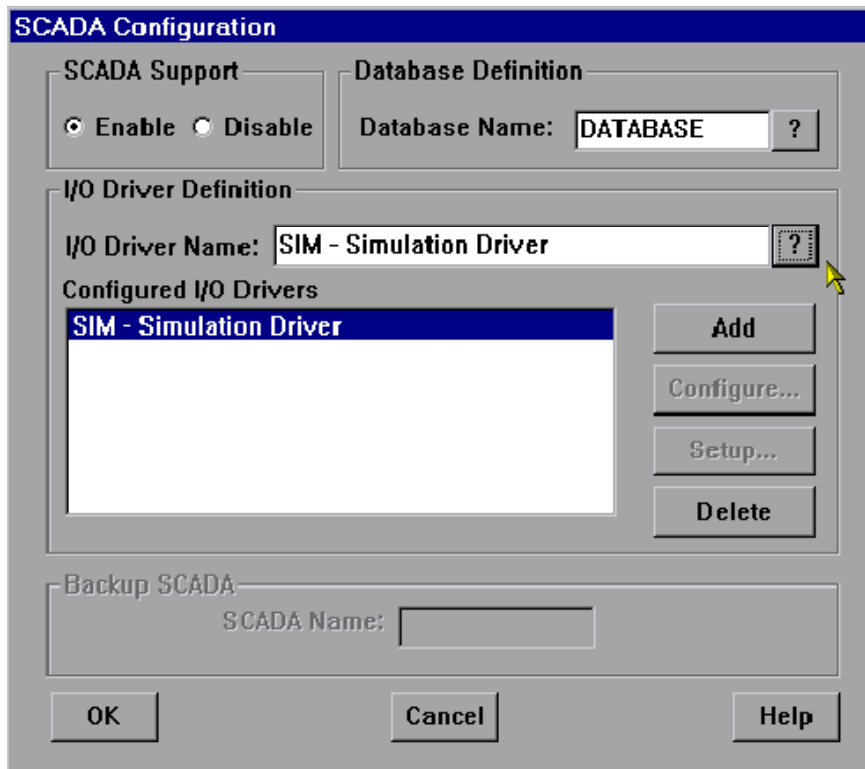
2.2 Configuring SCADA Properties

1. In **Intellution Dynamics WorkSpace**, expand the **FIX** tree list. Then, locate and select **System Configuration**.

2. In **SCU-FIX**, click **Configure | SCADA**.

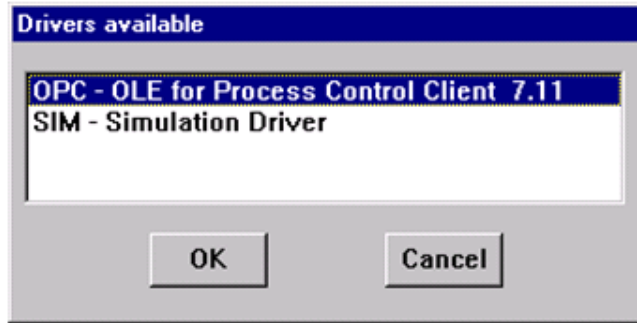


3. In **SCADA Configuration**, locate **SCADA Support** and then select **Enable**.
4. Leave **Database Name** at its default setting "DATABASE".

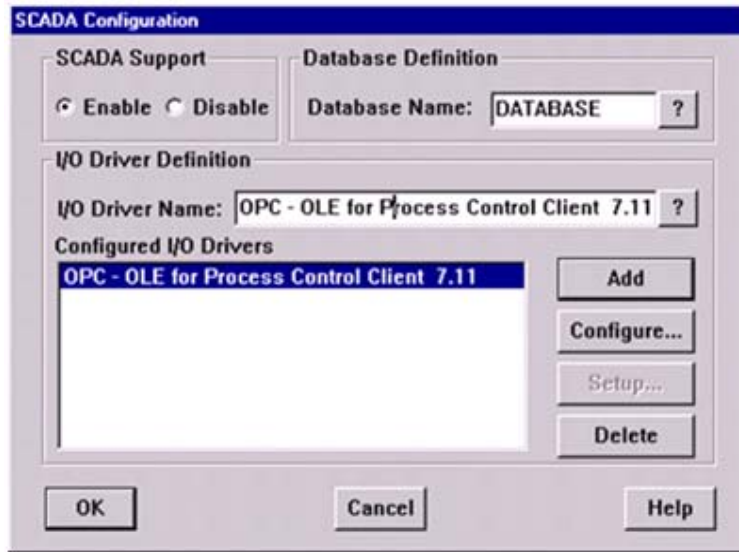


5. In **I/O Driver Name**, click the question mark icon to browse the list of available drivers.

6. Select **OPC - OLE for Process Control Client 7.11**, and then click **OK**.



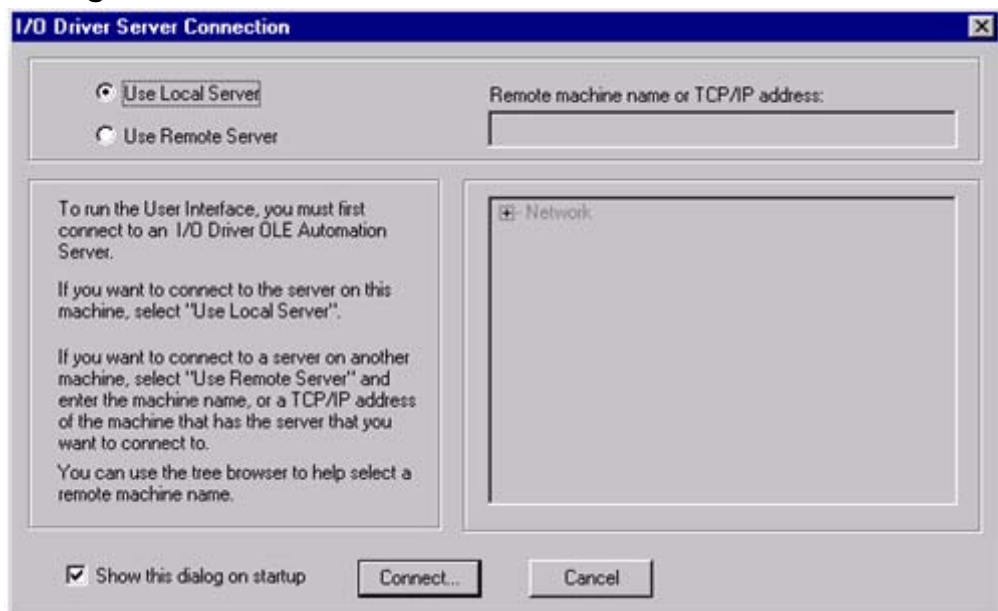
7. Next, click **Add**.



Note: The driver should now be visible in the **Configured I/O Drivers** field.

2.3 Configuring the Server

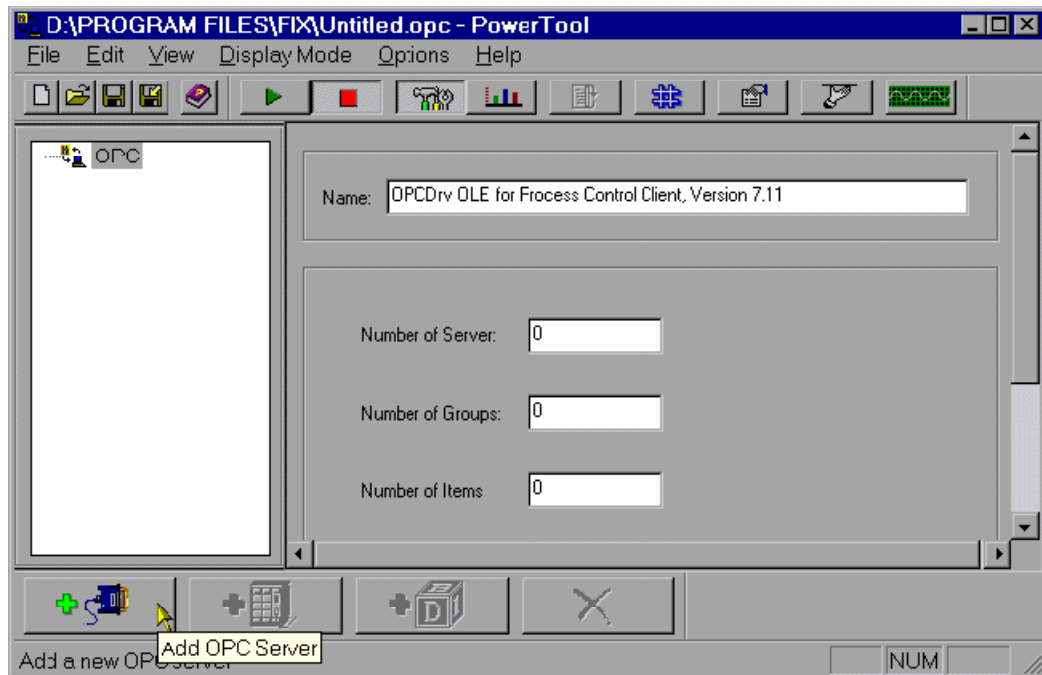
1. In **Configured I/O Drivers**, select the newly-configured driver. Then, click **Configure**.



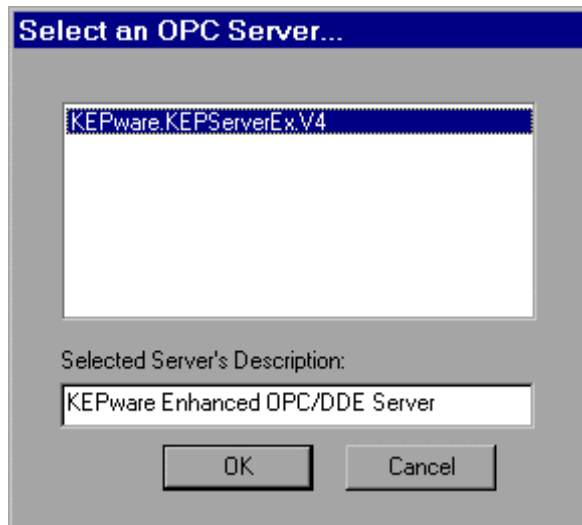
2. In **I/O Driver Server Configuration**, select **Use Local Server**. Then, click **Connect**.

2.4 Adding a Server to the OPC PowerTool

1. In **PowerTool**, click the **Add OPC Server** icon.



2. Next, select an OPC server from the browser window. Then, click **OK**. In this example, "KEPware.KEPServerEx.V4" is selected.

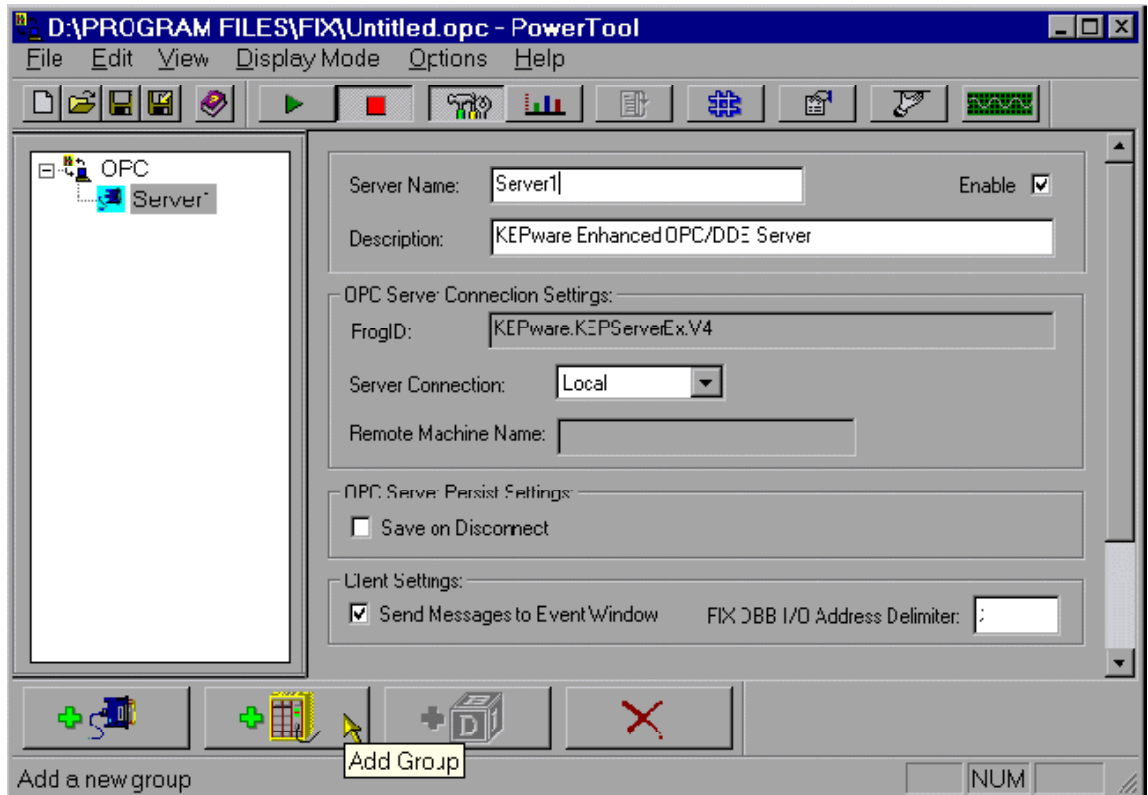


3. In **Server Name**, specify a name for the server. In this example, "Server1" is used.
4. In **Description**, enter a short description of the server for identification purposes. In this example, "KEPware Enhanced OPC/DDE Server" is used.

5. Next, check **Enable**. If left unchecked, users will be unable to communicate with devices in the server.
6. Leave the rest of the options at their default settings. Do not check **Save on Disconnect**, as this is a function that KEPServerEX does not support.

2.5 Adding an OPC Group

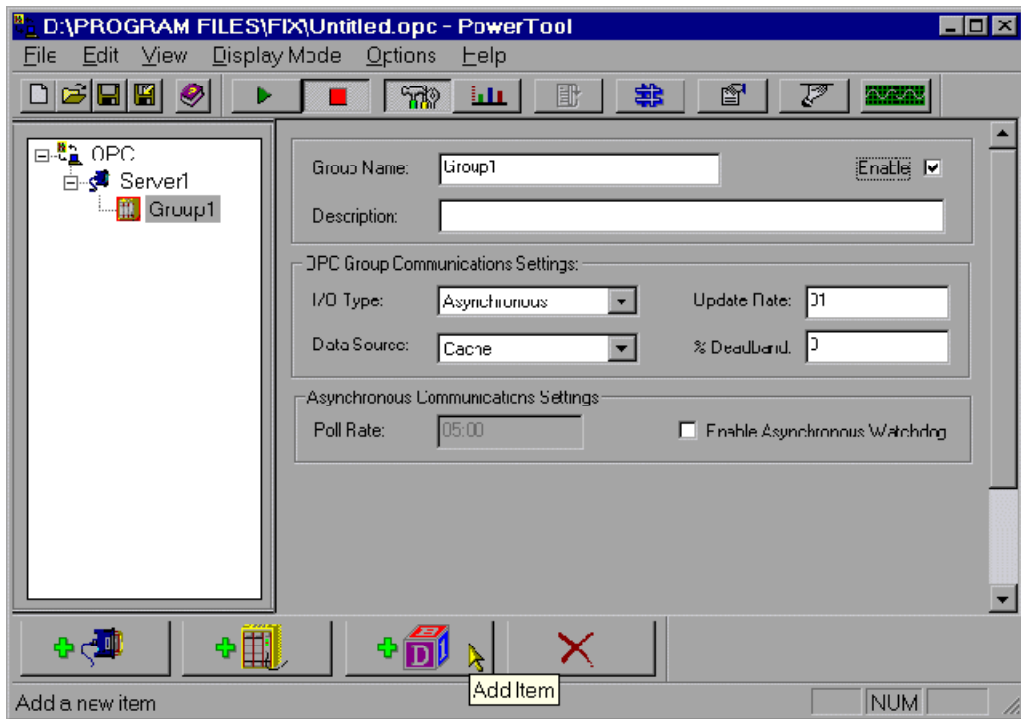
1. Next, click the **Add Group** icon.



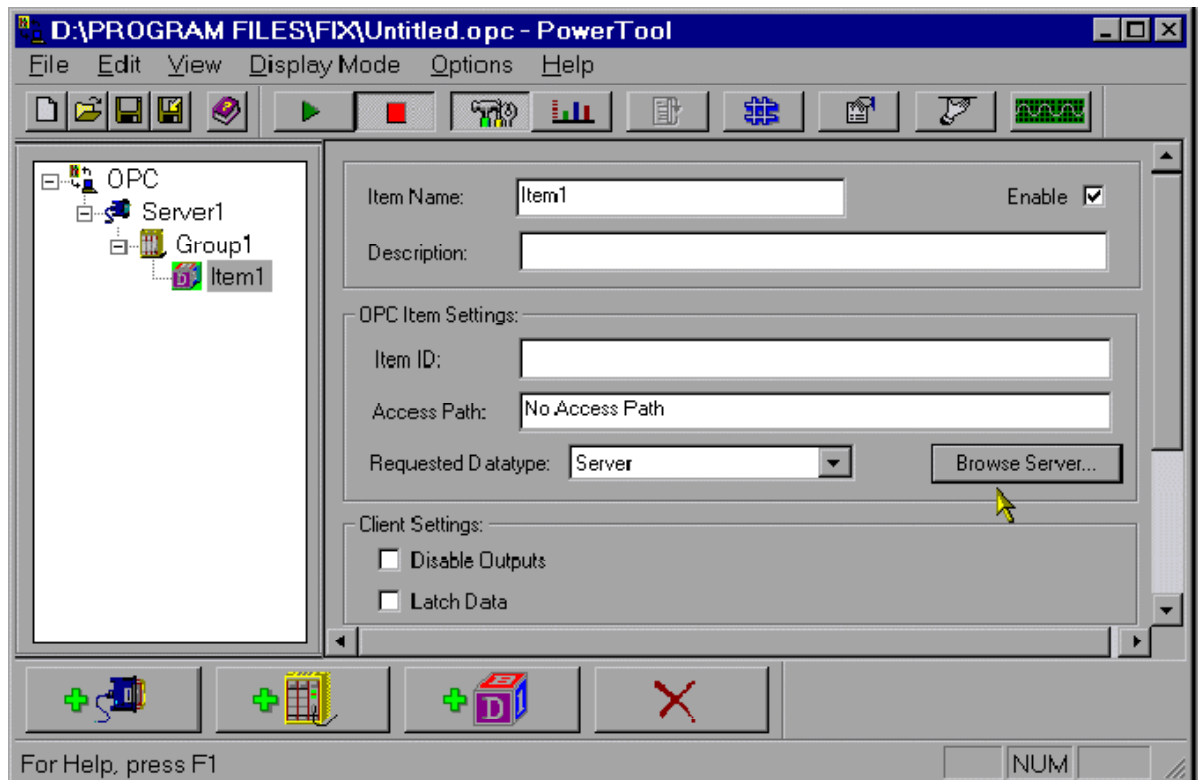
2. In **Group Name**, enter a name for the group. In this example, "Group1" is used.
3. In **Description**, enter a short description of the group for identification purposes.
4. Next, check **Enable**. If left unchecked, users will be unable to communicate with the group or any attached items.
5. In **I/O Type**, select either **Synchronous** or **Asynchronous**. In this example, Asynchronous is selected.
6. In **Data Source**, select **Cache**. Cache reads are recommended because they are usually faster.
7. Next, set the **Update Rate**, **% Deadband**, and **Poll Rate** parameters as required by the project. For more information on these parameters, refer to the server help file.

2.6 Adding an OPC Item or Tag

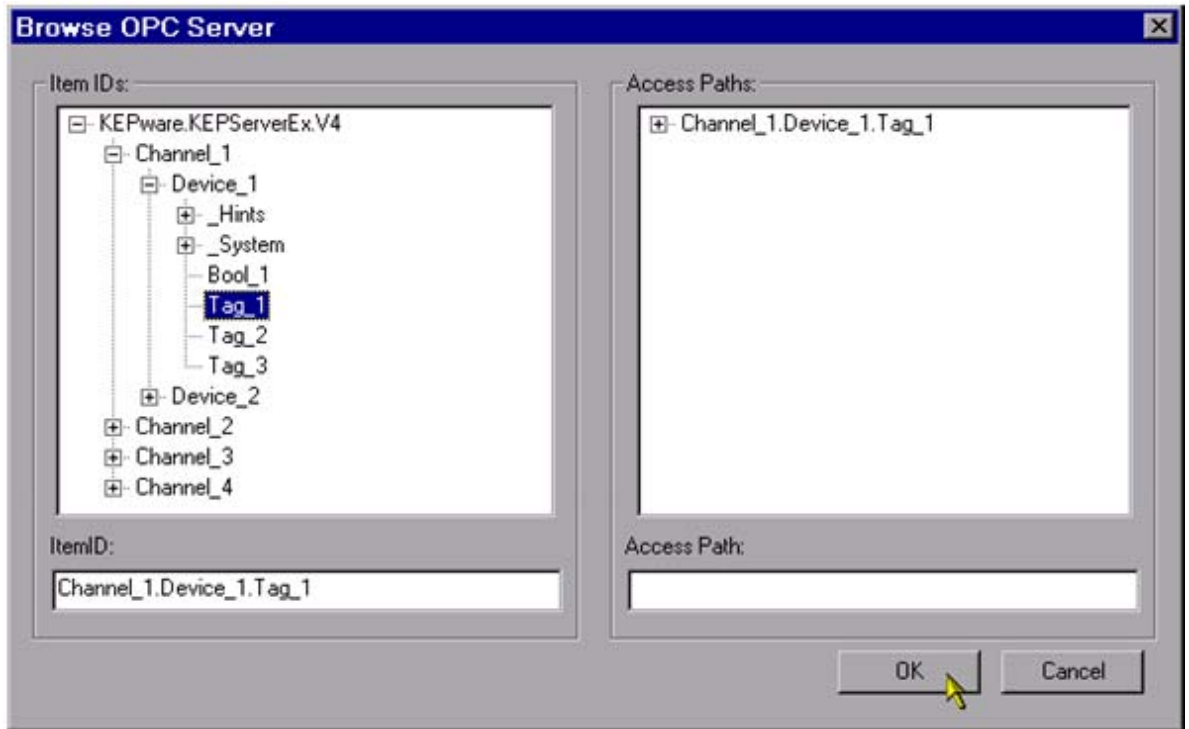
1. In **PowerTool**, click **Add Item**.



2. In **Item Name**, enter a name for the item. In this example, "Item1" is used.
3. In **Description**, enter a short description of the item for identification purposes.
4. Next, check **Enable**. If left unchecked, users will be unable to communicate with the item.
5. Then, click **Browse Server**.

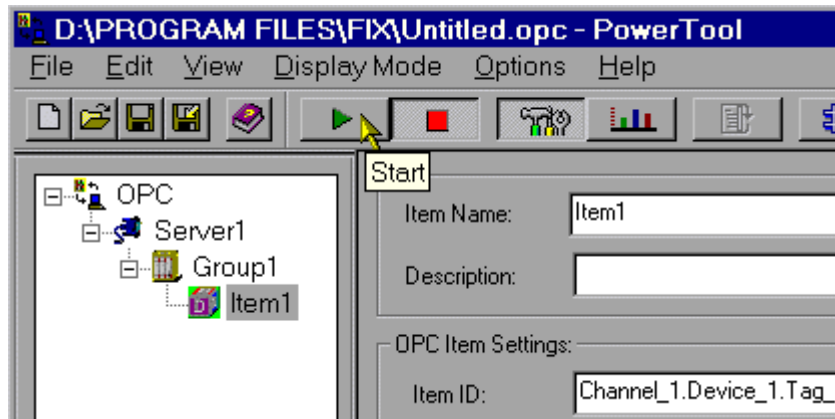


- In the **KEPware.KEPServerEx.V4** tree list, select an Item ID or a user-defined tag. In this example, "Tag_1" was chosen.



Note: In this example, the Access Path was left blank. Users that did not add tags to the server can add them dynamically from this dialog. The proper format is *<Channel>.<Topic>.<Item>*. In KEPServerEX, the *<Topic>* is the device name, and the *<Item>* is the user-defined or dynamic tag.

- Once finished, click **OK**. Then, click **Save**.
- To verify the connection to the server, click **Start | Statistics**.



3. Using Kepware's OPC Client

Kepware provides an OPC client application with each installation of KEPServerEX for testing purposes. For more information, refer to the OPC Quick Client help file.