



Kepware Technologies

KEPServerEX Client Connectivity Guide for Lookout™ Direct

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1. Overview and Requirements

This guide will demonstrate how to establish a connection between the KEPServerEX OPC server and an AutomationDirect Lookout™ Direct runtime project. Users must complete the following before continuing with this tutorial:

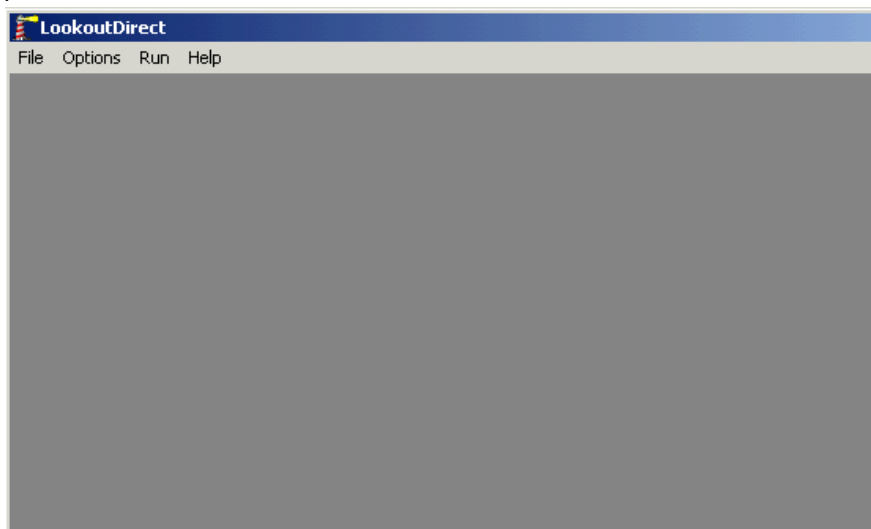
- Configure a server project. Users may either select the appropriate driver and settings or run the **Simulation Driver Demo** that is included with KEPServerEX. The Simulation Driver Demo project will be used for all examples in this tutorial.
- Start KEPServerEX and load the Simulation Driver Demo 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. Using AutomationDirect Lookout™ Direct as an OPC Client

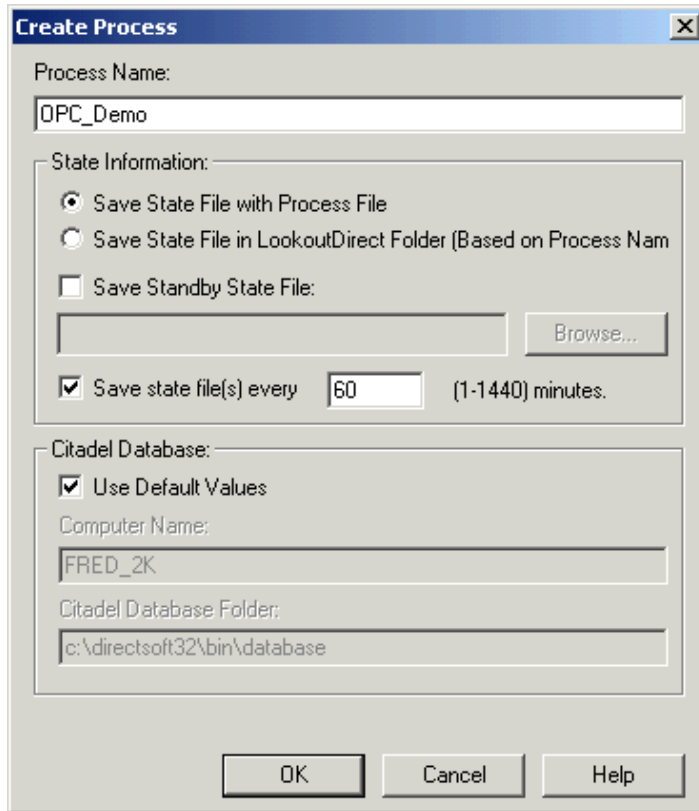
2.1 Connecting to the Server from Lookout™ Direct

AutomationDirect's Lookout™ Direct is one of many HMIs that can be used to connect to KEPServerEX. In this tutorial, Lookout™ Direct version 4.5.1 (Build 18) will be used. For information on creating an OPC connection to the server from Lookout™ Direct, refer to the instructions below.

1. To start, open Lookout™ Direct. Then, click **File** | **New** to start a new process.

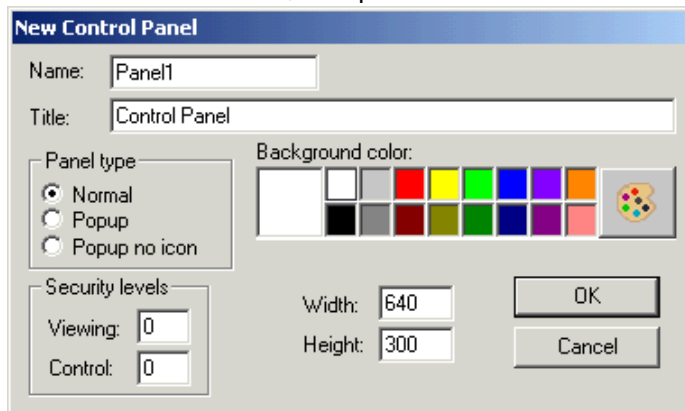


- In **Create Process**, enter a name for the process. In this tutorial, "OPC_Demo" is used. The default settings may be kept for the remaining parameters. For more information on the other parameters, refer to the Lookout™ Direct help documentation.



- Next, click **OK**.
- In the **New Control Panel**, accept the default settings or specify new ones.

Note: In this tutorial, the panel screen size was changed to 640x300.



- Once finished, click **OK**.

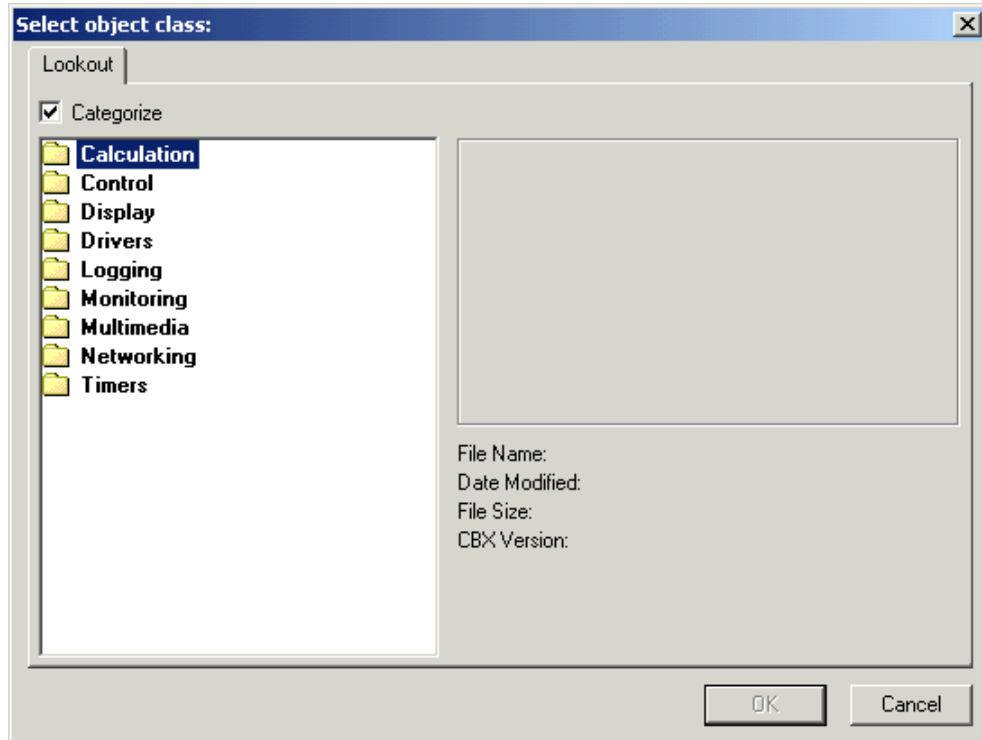
Note: Users will return to the Lookout™ Direct main menu.



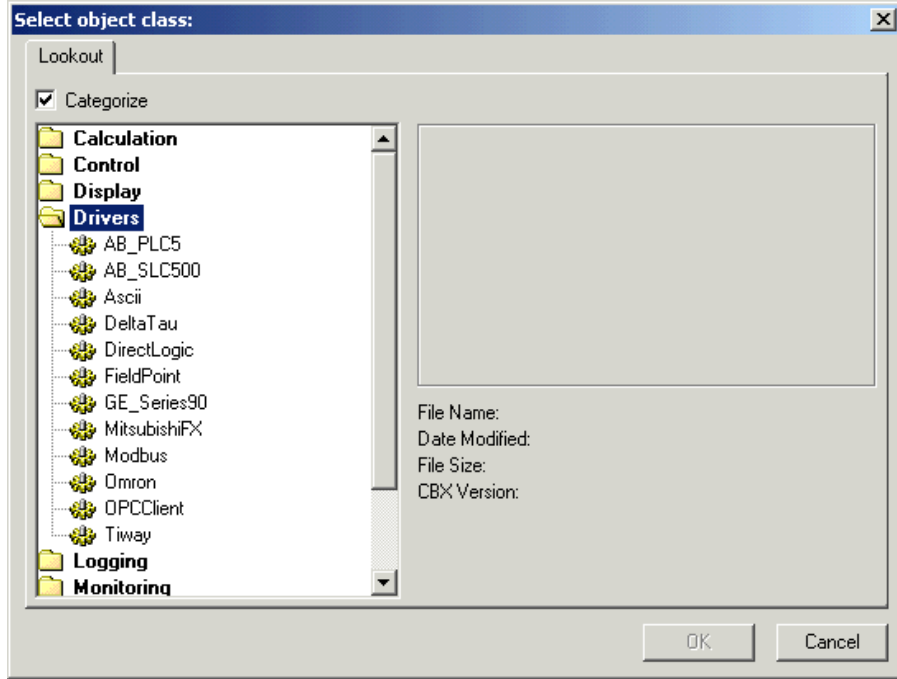
2.2 Creating an OPC Client Object

Data must be acquired into a process for display and control. To do so, create an object class to handle the communications between KEPServerEX and Lookout™ Direct.

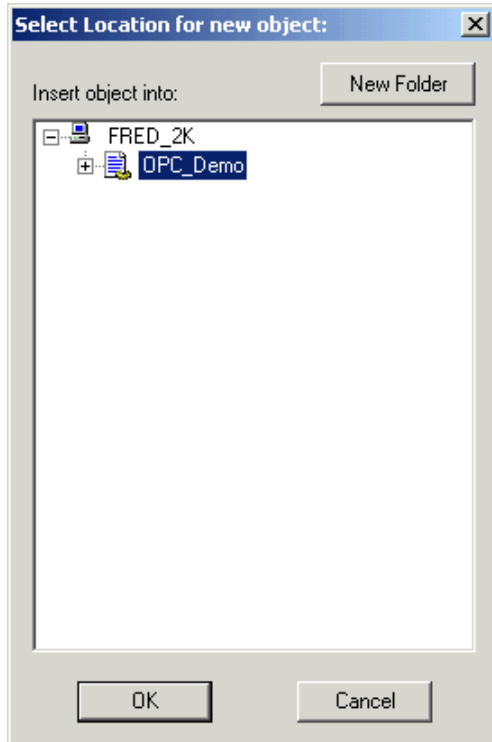
1. To start, select **Object | Create...** to open **Select Object Class**.



- Next, double-click on the **Drivers** folder and then select **OPCClient**. Once finished, click **OK**.

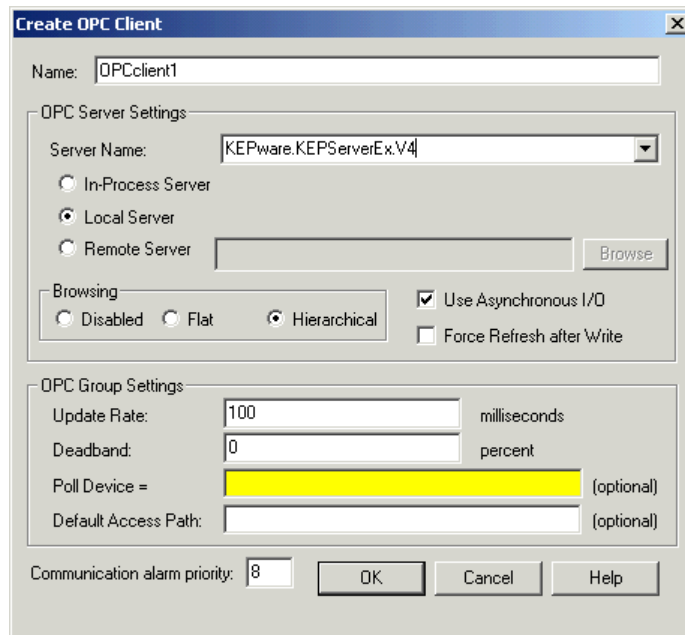


- In **Select Location for new object**, select the newly created process. Once finished, click **OK**.



- In **Create OPC Client**, enter a new name or accept the default setting. Then, select **KEPServerEX** from the drop-down list beneath **OPC Server Settings**.

Note: Make sure that the correct Program ID is selected for the version of KEPServerEX. In this tutorial, the Program ID "KEPware.KEPServerEX.V4" was selected for version 4.x. The Program ID "Kepware.KepserverEx.V5" should be selected for version 5.x.

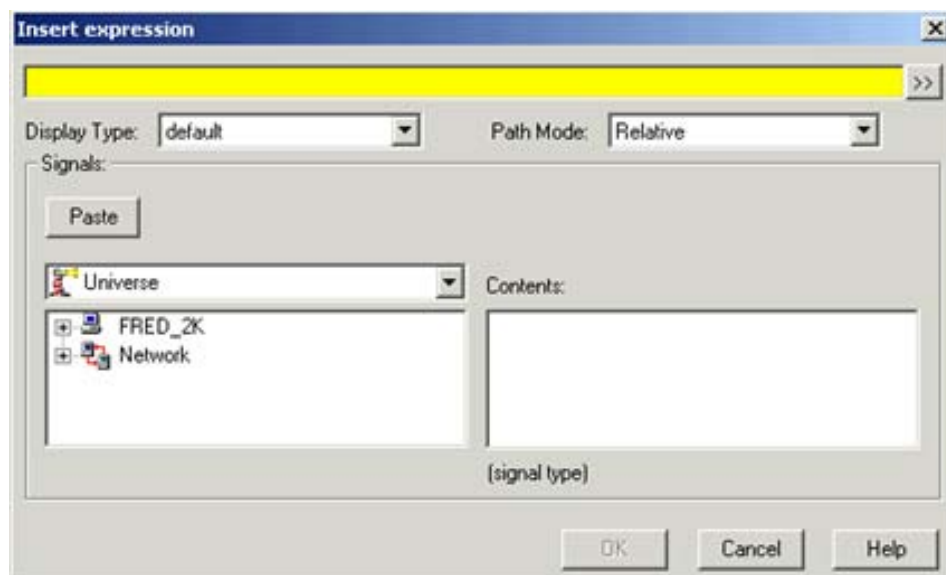


5. Assume that a connection is being made to the local server. Then, click **OK** to accept the client settings.

2.3 Adding a Display Object to the Panel

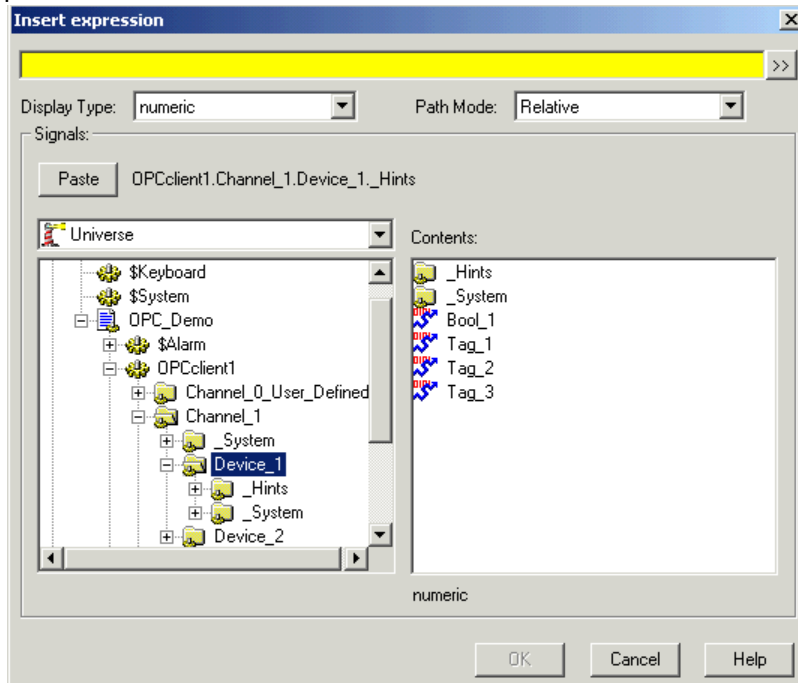
Users must add a display in order to view the value from the server in the Control Panel. For more information, refer to the instructions below.

1. To start, click **Insert | Expression...**
2. In **Insert Expression**, beneath **Signals**, expand the objects until the folders beneath **OPCClient Object** are visible. These folders are the channels and devices that were created in the KEPServerEX project.

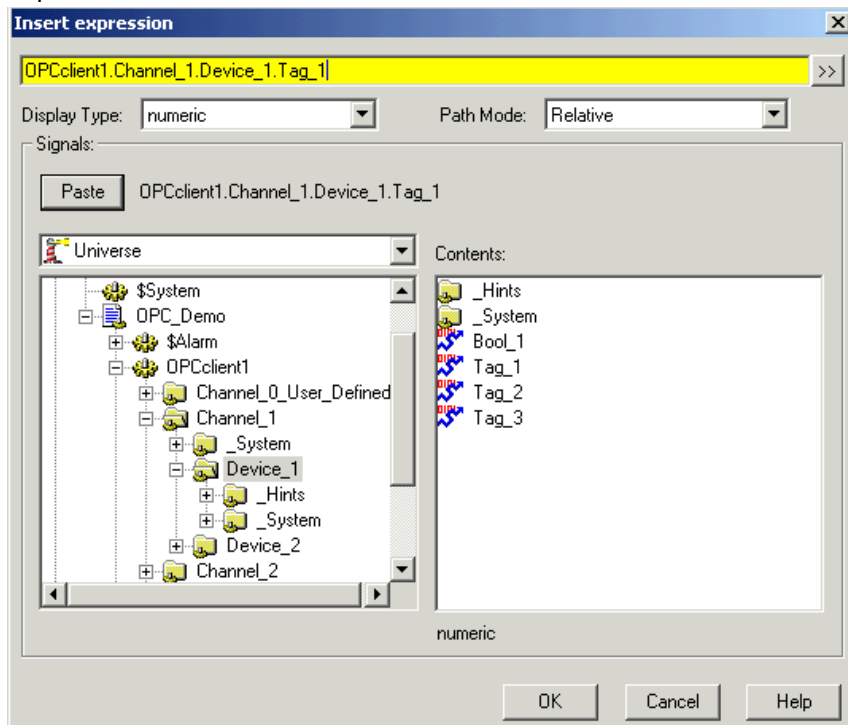


- Next, select the device folder that contains the tag that will be displayed in the control panel.

Note: The device-specific internal tag folders (as well as the tags that were added to the device in KEPServerEX) should now be visible in the right-hand pane.



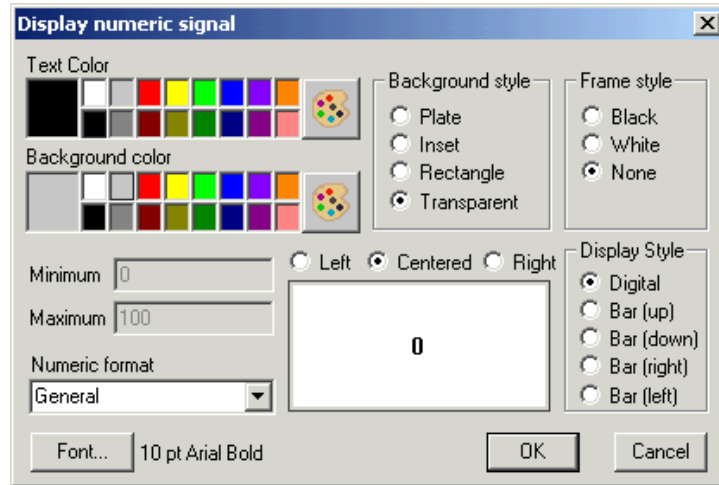
- Next, select the desired tag. Then, click **Paste** to add it to the yellow Expression field.



- Once finished, click **OK**.

6. In **Display Numeric Signal**, specify the selected tag's display settings.

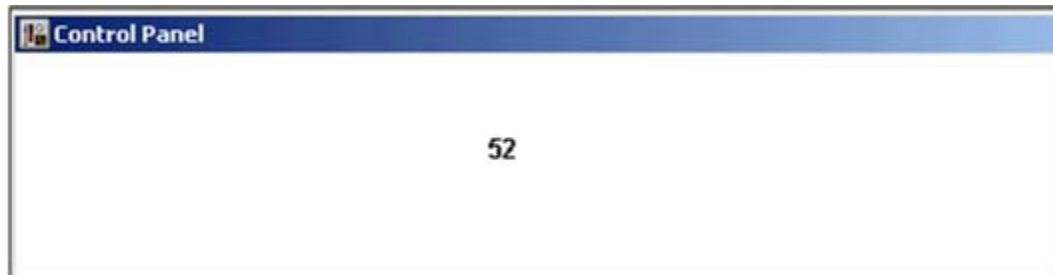
Note: In this tutorial, all default settings were accepted for the Word tag except for Background Style. This was changed to "Transparent".



7. Once finished, click **OK**.

2.4 Viewing Live Data

If the client properties were configured correctly, changing data should now be visible in the Control Panel.



3. Using Kepware's OPC Quick Client

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