GenBroker – Passing OPC Data over TCP/IP

APPLICATIONS NOTE

October 2013

Description: Guide to configure GenBroker to provide OPC Communications over TCP/IP
OS Requirement: Win XP Pro, Server 2003, Vista, Windows7
General Requirement: Understanding of GENESIS32 and OPC data

Introduction

GenBroker OPC over TCP/IP technology provides users with a simple method to configure OPC communications for use over the Intranet and Internet. Now OPC Client applications can be instantly web-enabled using this new DCOM replacement technology.

Configuration Server Computer

On the OPC server computer, install GenBroker by installing GENESIS32 version 9, or by selecting "Gen Broker" from the installation dialog.

Figure 1 - Standalone GemBroker Installation

NOTE: Optionally, when installing GENESIS32 you may uncheck all the modules. This will result in installation of the minimum number of files possible for running GenBroker.

It is unnecessary to configure GenBroker on your server if it is only serving data and not receiving data. However, if you have configured GenBroker to have an active configuration already, please check that TCP/IP communications is enabled by dong the following:

1. Go to Start → Programs → ICONICS Tools → GenBroker Configuration
2. Expand to Advanced → Server → General on the left hand side and make sure that that "Enable OPC over TCP/IP" communications is checked.
3. Save the GenBroker configuration if you have made any changes.

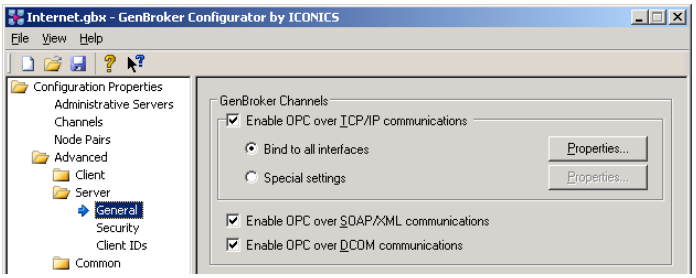

Figure 2 - GenBroker Server Side Configuration

4. Start GenBroker on Server Computer
5. You can start GenBroker by either running it as a Windows Service, or by using ICONICS GenTray, located on the Windows standard System Tray, or via MonitorWorX.

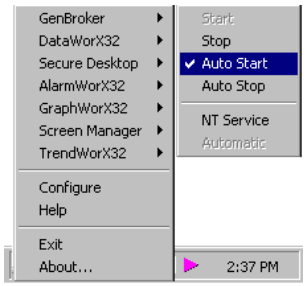

Figure 3 - Starting GenBroker from GenTray

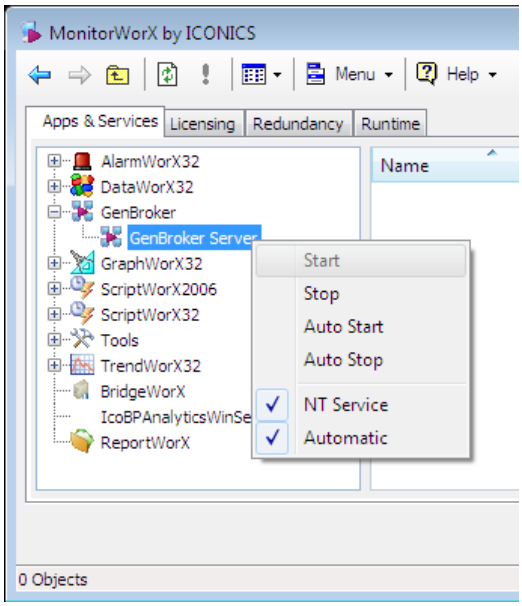

Figure 4 - Starting GenBroker via MonitorWorX

Configuration Client Computer

GENESIS32 version 9 must also be installed on the client computer.

1. Start the GenBroker Configurator from Start → Programs → ICONICS Tools.
2. Click on the Channels item on left hand side tree.
3. Right click on "OPC over TCP/IP Direct Channels" and select "Set As Default."
4. Right click on "OPC over TCP/IP Direct Channels" again and select "Add Node." Add the node name or IP address of the computer where the OPC server is installed. In the figure below, the OPC server resides on a machine named "Myopcserver."

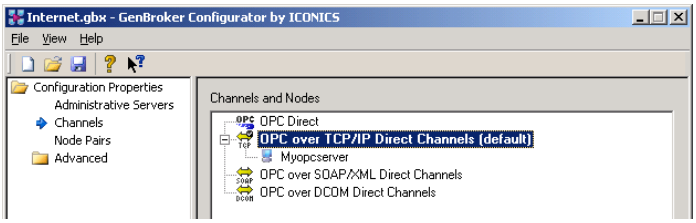

Figure 5 - GenBroker Client Side Configuration

5. Go to File → Save As and save the file at a location that is convenient for you.

Live Data

1. Start GraphWorX32 and place a Process Point on the display.
2. Click on "Data Tags" to open the Unified Data Browser.
3. Expand "Internet" → "OPC over TCP/IP Direct Channels" to browse the TCP/IP network.

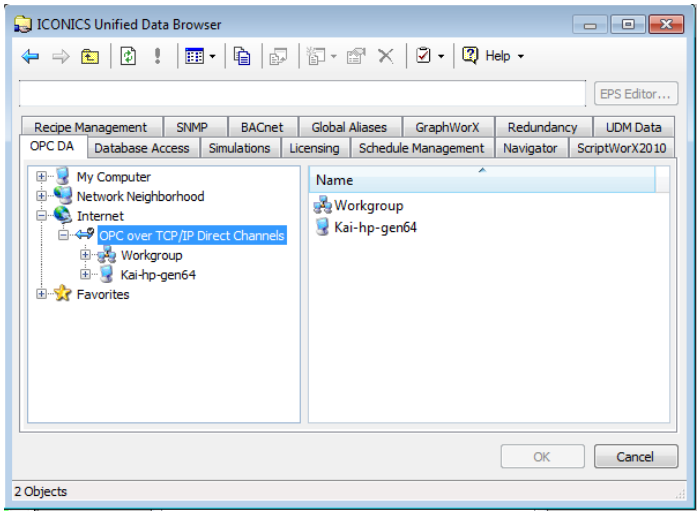

Figure 6 - Browsing for Tags Over the Internet

4. Select your OPC server node and browse under that for your tag. Double-click on the tag.

5. The Property Inspector should now show the tag name. It should look something like Figure 7 below.

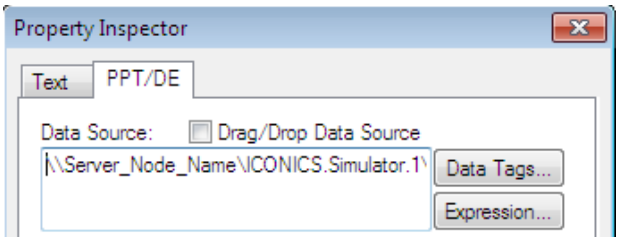

Figure 7 - A Remote OPC Tag

6. Click "OK" and go into Runtime. You should see live data from your remote OPC server.