



Description: *Configuring GenBroker to provide OPC Communications over TCP/IP.*

OS Requirement: *Windows XP/2000/NT, 9x/Me.*

General Requirement: Understanding of GENESIS32 and OPC data

GenBroker OPC over TCP/IP technology provides users with a simple method to configure OPC communications for Intranet and Internet. Now, OPC Client applications can be instantly WEB enabled using this new **DCOM replacement technology**. This simple app note steps you through an example of configuring GenBroker.

Configuration Server Computer

On the OPC server computer you install GenBroker, by installing GENESIS32 v8.

NOTE: Optionally you may install GenBroker by unchecking all the modules during GENESIS32 installation. This will result in installation of the TOOLS directory, which includes GenBroker.

1. To configure GenBroker click *Start, Programs, ICONICS GENESIS-32, Tools, GenBroker Configuration*.
2. Select 'Use alternate configuration for GenBroker server' and click on Edit button. This takes you into the *GenBrokerConfigurator by ICONICS*. Make sure that the check box is checked for Enable OPC over TCP/IP communications like in figure below

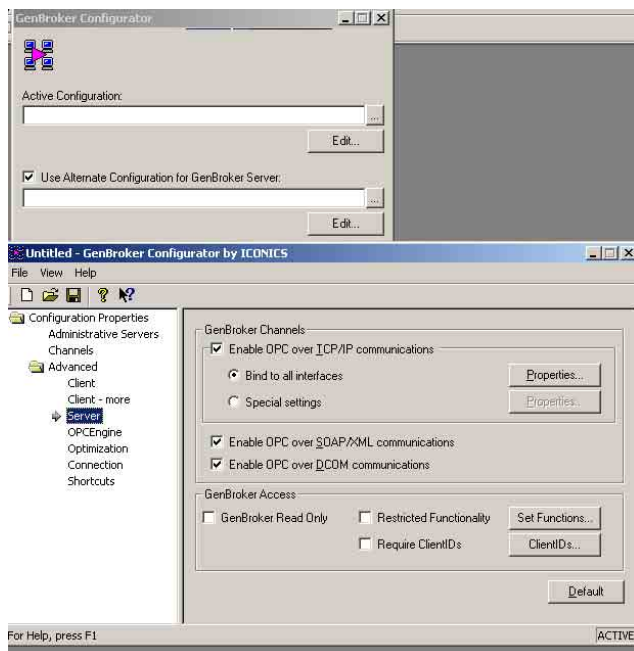


Fig1: GenBroker Server side configuration

Start GenBroker on Server Computer

GenBroker can be started by either running it as a Windows Service, or by using ICONICS GenTray, located on the Windows standard System Tray.

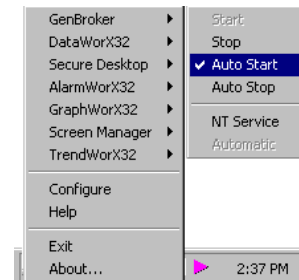


Fig 2: Start GenBroker on server side from GenTray

Configuration Client Computer

On the client computer you install GENESIS-32 v8.0

1. Start GenBroker configurator (from Start- Programs- ICONICS GENESIS32- Tools) and select EDIT button (since we do not have a genbroker configuration file yet, to browse for).
2. This opens an UNTITLED.GBX file for you to configure and save, with a different name (optionally).
3. Click on the CHANNELS item on left hand side tree.
4. Right click on OPC Over TCP/IP Direct channels and select SET AS DEFAULT
5. Right click on OPC Over TCP/IP Direct channels and select ADD NODE and add the node name/IP address of the computer where the OPC Server is installed(192.168.2.247).

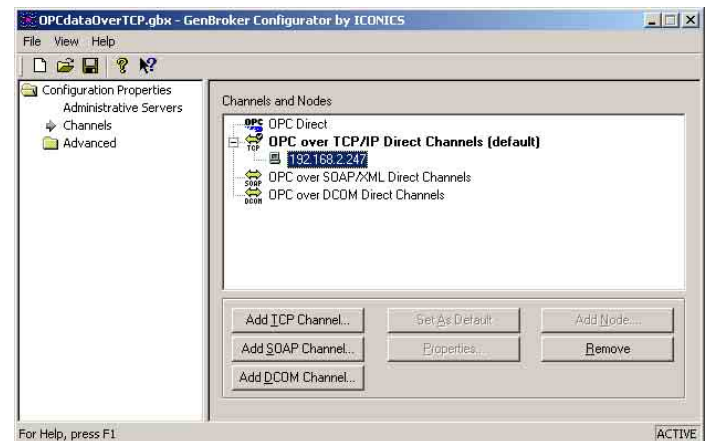


Fig 3: GenBroker configuration on client side

6. Save the file with the name OPCDataOver TCP.gbx. The GenBroker Configuration will now point to this file, like in figure below.



Fig 4: Active GenBroker configuration for clients

Live Data !

Start **GraphWorX32** and place a Process Point on the display. The Unified data browser will guide you in selecting your favorite OPC Tag.

- Select the **Internet** icon in the left Window in order to browse the TCP/IP network.

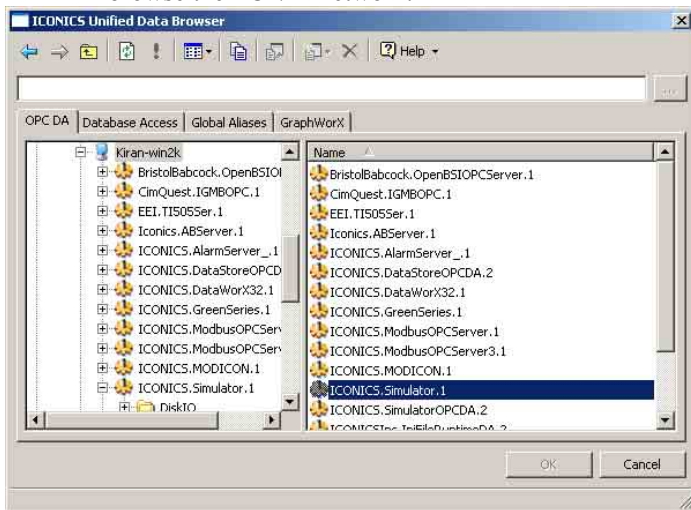


Fig 5: Browsing for tags over internet (TCP/IP) from the unified data browser

- Select OPC Server Node (above figure shows you node name corresponding to the IP address added in step 5 above) and pick your tag (from ICONICS Simulator server in this case).
- Select **OK** after selecting the Tag
- The **Property Inspector** shows the tag name. You can click **OK**
- Go to **GraphWorX Runtime**
- Live data is shown as seen below.

0.00

\\Kiran-win2k\ICONICS.Simulator.1\GlobalVariables.Analog2 = 0

Fig 6: Getting real time data from remote station using TCP/IP