# - GenStatistics

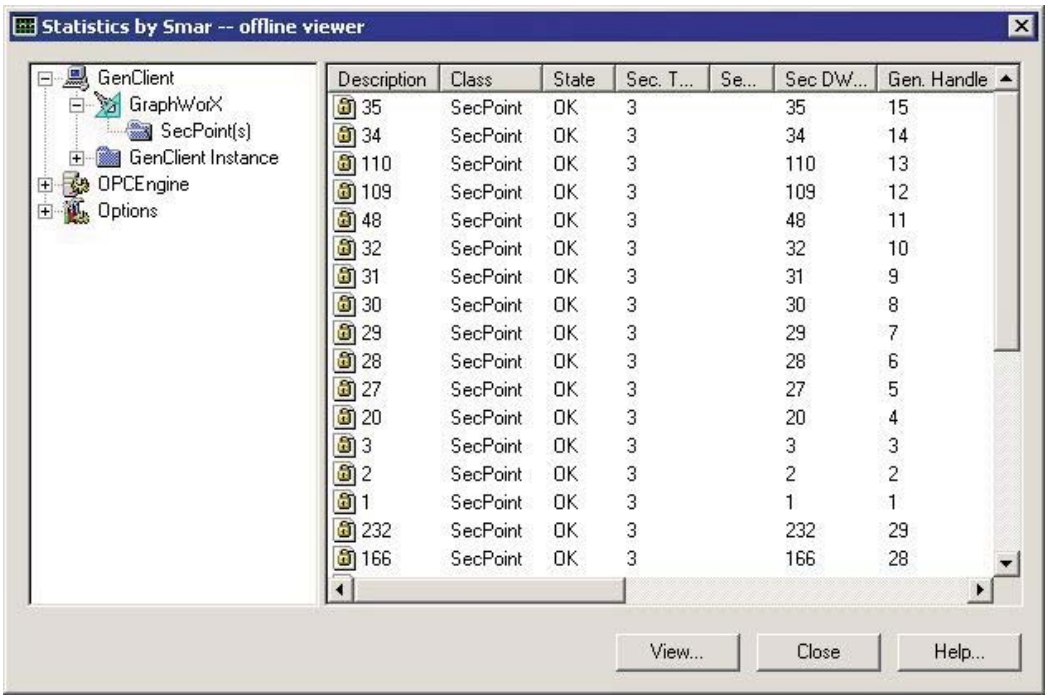
Smar
First in Fieldbus

MAY / 06
GenStatistics
VERSION 8

FOUNDATION



# GenStatistics Viewer

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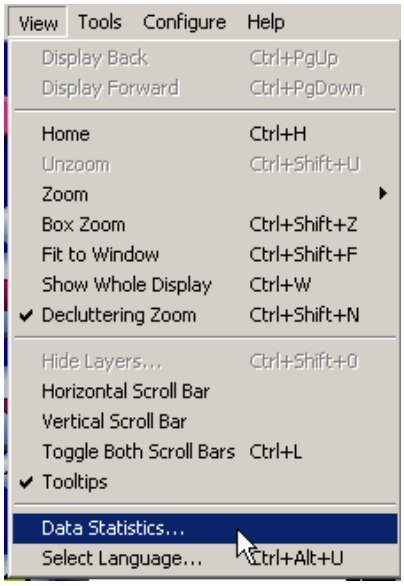
# GENSTATISTICS RUNTIME VIEWER

The GenStatistics Runtime Viewer provides GenBroker/GenClient runtime data tracking for applications running in the ProcessView system. The GenStatistics Viewer is designed for systems integrators, OEMs and customers who want to have tools for doing their own troubleshooting and diagnostics. The GenStatistics application gets the runtime statistics in an XML format from the application (actually from GenClient the particular application is using).

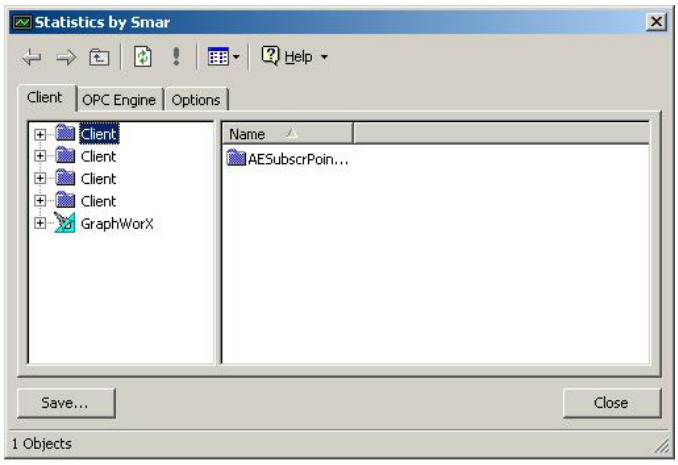
To launch the GenStatistics Viewer from client applications (e.g. GraphWorX):

**1.** Select **Data Statistics** from the **View** menu in runtime mode, as shown in the figure below.




***Opening the GenStatistics Viewer***

**2.** The GenStatistics Viewer dialog is launched displaying runtime information, as shown in the figure below. This dialog is implemented in the GenClient/OLExpress DLL library, and it is available throughout the ProcessView applications. Click the Refresh button periodically to update the data.



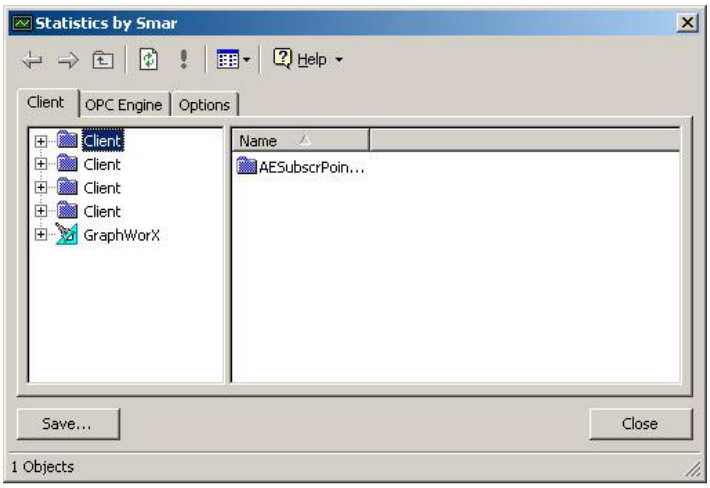

***GenStatistics Runtime Viewer***

There are three main tabs in the dialog that are displayed in a standard format (like Windows Explorer):

- GenClient Tab
- OPC Engine Tab
- Options Tab

## GenClient Tab

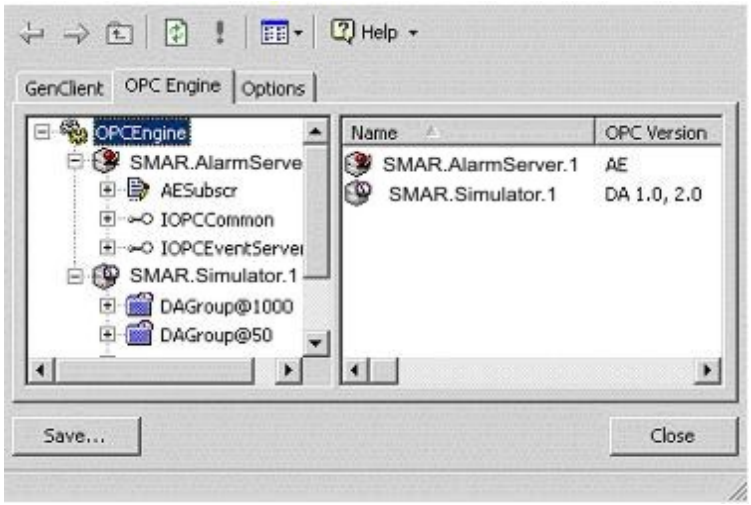
The **GenClient** tab of the GenStatistics Runtime Viewer contains subtrees for each instance of the GenClient object the given application is using. Note that there may be additional GenClient instances for one application. Under the GenClient instances there are points used, sorted into groups by the kind of data the points are accessing. Note there are **OPCSecPoints** (for OPC DataPoints with security), **SecPoints** (for security) and **RegAppPoints** (for registering applications at GenRegistrar).




***GenStatistics Runtime Viewer: GenClient Tab***

## OPC Engine Tab

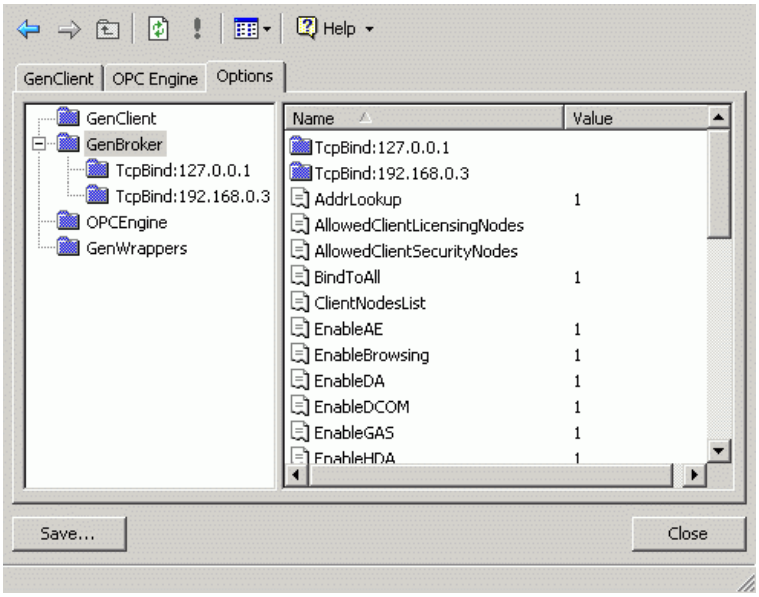
The OPC Engine tab of the GenStatistics Runtime Viewer aggregates all points requested by the given application and groups them for particular servers (if GenClient communicates with the given server directly via OPC Direct) or by a GenWrapper (if GenClient uses a channel to communicate with the given server). The statistics data are then related to the given channel or server type.




***GenStatistics Runtime Viewer: OPC Engine Tab***

## Options Tab

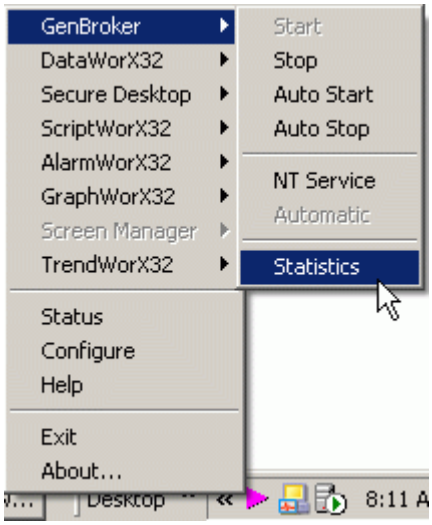
The **Options** tab of the GenStatistics Runtime Viewer displays the settings from the GenBroker Configurator. This is helpful for debugging because it contains the actual GenBroker settings.




***GenStatistics Runtime Viewer: Options Tab***

## GenBroker Tab

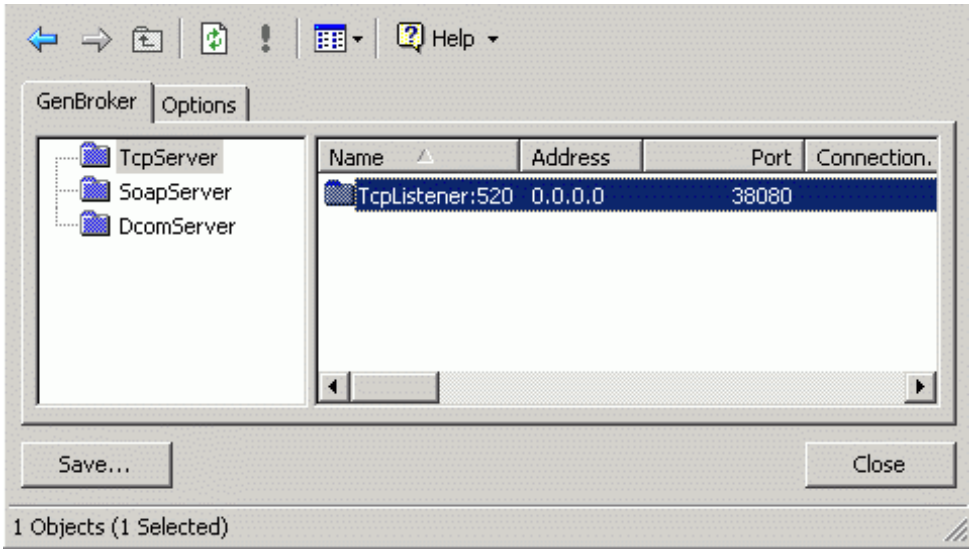
When you start the GenBroker server from ProcessView Tray by selecting **GenBroker > Start** from the ProcessView Tray menu, a **Statistics** menu item appears in ProcessView Tray, as shown in the figure below.




***Viewing GenStatistics From ProcessView Tray***

Selecting **Statistics** from the ProcessView Tray menu opens the **GenBroker** tab of the GenStatistics Runtime Viewer, as shown in the figure below. This tab lists the IP address, port number, and other information about the following servers:

- TCP/IP server
- SOAP/XML server
- DCOM server

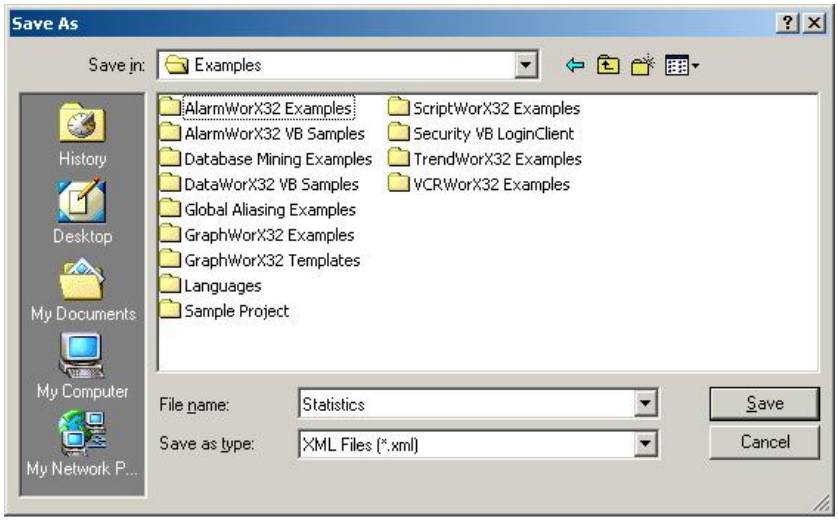



***GenStatistics Runtime Viewer: GenBroker Tab***

## *Saving Runtime Data to a Log File*

The GenStatistics Viewer tracks the runtime activity for each ProcessView application and logs the runtime data to an XML log file. To export the runtime statistics data to an XML log file:

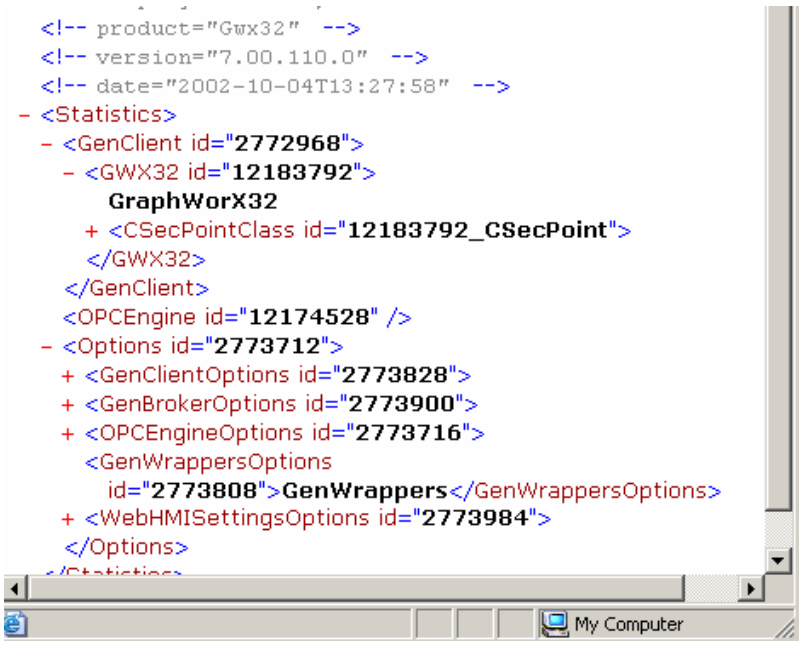
**1.** Click the **Save** button. This opens the **Save As** dialog box, as shown in the figure below. Give the log file a name, and then click **Save.**




***Saving the GenStatistics Viewer Data***

**2.** You can view the exported XML log file in your Web browser, such as Microsoft Internet Explorer, as shown in the figure below. The log file provides a thorough, color-coded report that mimics the expandable tree structure in the GenStatistics Viewer, detailing all activity for the application including the product, its version number, and the date. If you are experiencing problems with any applications, you can e-mail the log file as a detailed report to technical support. Developers can use these reports to identify the source of the problems.

| NOTE |
| --- |
| It is possible to view the XML file later on (offline) for debugging purposes |

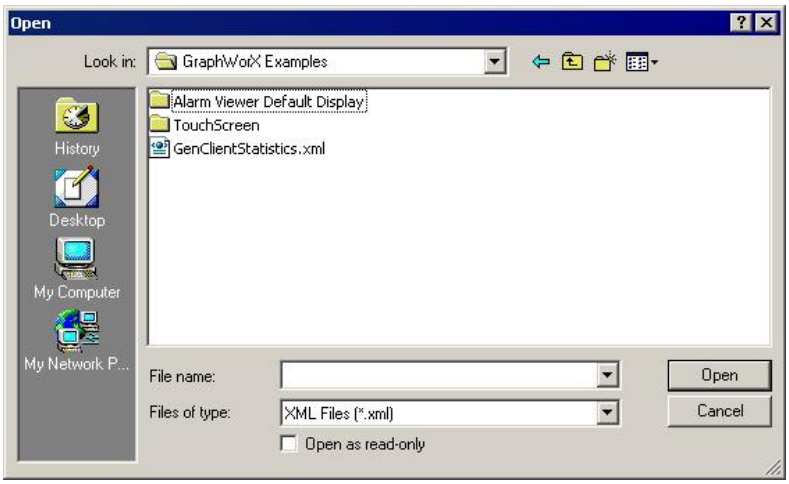



***Viewing the Exported XML Statistics File***

## GenStatistics Offline Viewer

To view data statistics outside runtime:

1. Launch the GenStatistics Viewer from the Windows **Start** menu by selecting **Programs** > **Smar ProcessView > Tools > GenStatistics Viewer.**
2. This launches the **Open** dialog box, as shown in the figure below. Browse for the GenStatistics XML log file name, and then click **Open,** as shown in the figure below.




***Opening the Log File***

3. The data from the log file are displayed in the GenStatistics Viewer dialog.