



## Running IGSS as an Operator, Part Two-

### Working with Graphs

#### Purpose

Learn how to:

- Open predefined graphs
- Create and open dynamic graphs

#### Task 1:

##### Open a predefined graph

You can view the data which your objects in the Supervise mimic diagram collect during operations through graphs you can define and save for re-use (predefined graphs) or through graphs you create and use at the time you need them. ... “on-the-fly” so to speak. (dynamic graphs)

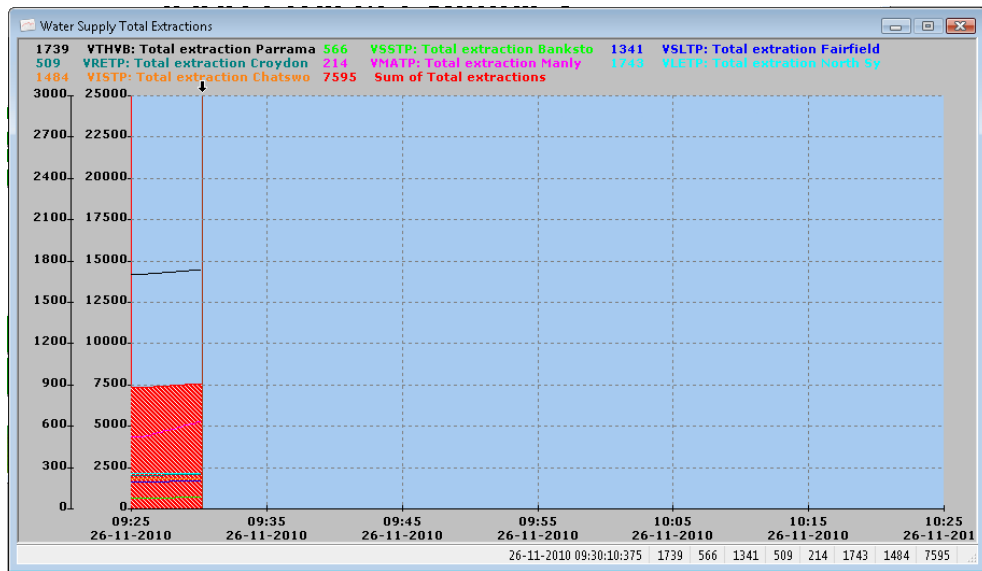
First, we will open and view a predefined graph. Then you can create your own dynamic graph.

The predefined graphs used in this exercise have been created for the demo project. You will be creating your own graphs and using them as predefined graphs in a later exercise.

Step	Action
1.	<p>In <b>IGSS Master</b> &gt; <b>Home</b> tab, click the <b>Start</b> button to start the demo.</p> <p>Click the <b>Supervise</b> button to open the demo diagram.</p> <p>In the menu of the Supervise mimic diagram, click <b>Area</b> &gt; <b>Cases</b></p> <p>In the menu of the Supervise mimic diagram, click <b>Graph</b> &gt; <b>Water Supply Total Extractions</b>.</p> <p>The <b>Water Supply Total Extractions</b> graph is displayed.</p>
2.	<p>In the <b>Water Supply Total Extractions</b> graph, right-click and select <b>Show Values List</b> to get an overview of the values used to draw the graph lines.</p> <p>Click the <b>Close</b> button to return to the graph.</p>
3.	<p>Select an area in the <b>Water Supply Total Extractions</b> graph with the mouse cursor. You can select an area when the mouse cursor changes to a crosshairs icon.</p> <p>The selected area zooms in and displays the graph and values. You can zoom out by right-clicking the graph and selecting <b>Rezoom</b>.</p>



4.	<p>Right-click in the <b>Water Supply Total Extractions</b> graph and select <b>Edit parameters</b> to open the <b>Define Graph Parameters</b> form.</p> <p>In the <b>Define Graph Parameters</b> form, click the <b>BCL</b> option in the <b>Source</b> group to change the data source for the graph from <b>LOG</b> to <b>BCL</b>.</p> <p>Note the change in “index” due to the change in data source.</p> <p>Click the <b>OK</b> button.</p>
5.	<p>Open the <b>Define graph parameters</b> form and experiment with the layout of the graph window (e.g., suppress some of the y-axes, change background colors and filling patterns, etc).</p>
6.	<p>Close the <b>Water Supply Total Extractions</b> graph, but remain in the <b>Cases</b> area. (in the menu, click <b>Area</b> and verify that the <b>Cases</b> option is still selected)</p>



**Task 2:**  
**Create a**  
**dynamic graph**

You can also create a dynamic graph, defining the requirements and display options as you need them.

In this exercise, you create a new dynamic graph and save it for future use, both as a dynamic graph and a static graph and then retrieve the saved graph for display on the screen.

Step	Action
1.	On the menu, click <b>Graph &gt; Create Dynamic Graph</b> to open the <b>Object Selection for Dynamic Graph</b> form.



2.	<p>In the Show Standard types objects list on the right, select :</p> <ul style="list-style-type: none"> <li>• <b>q1</b> and click the <b>Add</b> button.</li> <li>• <b>q2</b> and click the <b>Add</b> button.</li> <li>• <b>q3</b> and click the <b>Add</b> button.</li> </ul> <p>Click the <b>OK</b> button to open the <b>Define Graph Period</b> form.</p>
3.	<p>In the <b>Begin Time</b> field, in the <b>Define Graph Period</b> form, set the time to display one hour ago.</p> <p>Click the <b>OK</b> button. The graph for the values for the <b>q1</b>, <b>q2</b> and <b>q3</b> objects is displayed.</p>
4.	<p>Right-click inside the graph and select <b>Save As Dynamic Graph</b>,</p> <p>In the <b>File name</b> field, enter “Flows.usr” and remember the file location in the local machine’s hard drive</p> <p>Click the <b>Save</b> button and close the graph window by clicking on the <b>X</b> at the top right of the form.</p>
5.	<p>In the menu, click <b>Graph &gt; Open Dynamic Graph</b> and open the Flows.usr graph you just created.</p> <p>In the <b>Begin Time</b> field, in the <b>Define Graph Period</b> form, set the time to display one hour ago and click the <b>OK</b> button.</p> <p>The graph is displayed.</p>
6.	<p>Right-click inside the graph and this time select <b>Save As Static Graph</b></p> <p>In the <b>File name</b> field, enter “StaticFlows.gph” and remember the file location in the local machine’s hard drive</p> <p>Click the <b>Save</b> button and close the graph window by clicking on the <b>X</b> at the top right of the form.</p>
7.	<p>In the menu, click <b>Graph &gt; Open Static Graph</b> and open the StaticFlows graph you just created to display the graph.</p>

*YOU HAVE SUCCESSFULLY COMPLETED THE GRAPH EXERCISE. GO ON TO THE NEXT EXERCISE.*

## The Object Historian

### Purpose

Learn how to view and save data for selected objects in the configuration.



**Task 1:  
Select the objects  
for which data is  
required**

You can use the Object Historian to view past events in the monitored process, exporting the data if you desire for further processing in other systems.

You select can view four different event types in the Object Historian:

- Log data
- Alarm data
- BCL data
- User login/logout

Step	Action
1.	In <b>IGSS Master</b> > <b>Home</b> tab, click the <b>Start</b> button to start the demo.  Click the <b>Supervise</b> button to open the demo diagram.  In the menu of the Supervise mimic diagram, click <b>Area &gt; Training</b>  Click the <b>Refuse Disposal</b> diagram
2.	In the <b>Refuse disposal</b> diagram, select the <b>p1</b> and <b>p2</b> objects with the mouse.
3.	In the menu, click <b>Edit &gt;Object Historian</b> to open the <b>Object Historian</b> form.  The two objects ( <b>p1</b> and <b>p2</b> ) are displayed in the form, but we need to include the p3 object as well.
4.	Click the <b>Browse</b> button to open the <b>Object Browser</b> from.  Find the <b>p3</b> object, drag it into the <b>Object Historian</b> form and Close the <b>Object Browser</b> .  <b>Tip</b> See <b>Exercise 1: Working as an Operator</b> in <b>IGSS Online in Supervise mode</b> for instructions on how to locate objects in the <b>Object Browser</b> form.  The <b>Object Historian</b> form should now contain three objects: <b>p1, p2</b> and <b>p3</b> .
5.	Click the <b>Query Data</b> button to gather the data for the three objects: <b>p1, p2</b> and <b>p3</b> .  The <b>Object Historian's</b> main pane will be populated with the data observations for the objects: <b>p1, p2</b> and <b>p3</b> .



**6.** In the **Time interval** group, set the start and end dates and the start and end time parameters to gather data from

- One hour ago
- 5 minutes ago
- Only yesterday

Click the **Query Data** button to gather the data with the start and end dates and times you defined above.

**7.** The **Object Historian** form displays log data, but you can change the type of data displayed in the **Event Types** groups.

Click the **Export as CSV** button to save the data presented in the Object Historian main pane as a comma-separated file.

You can use the comma comma-separated file as input in other programs such as MS-Excel to create advanced tables and graphs or import the values in another database program to continue working with the values

Try to change the parameters in the **Time interval** and **Event types** groups to see the effects on the data gathered.

Time	Event type	Object	Area	Info 1	Info 2
		p1	Global	Will be checked for events.	
		p2	Global	Will be checked for events.	
		p3	Global	Will be checked for events.	
		q6	Global	Will be checked for events.	
		q6	Global	Will be checked for events.	
		q6	Global	Will be checked for events.	
		q7	Global	Will be checked for events.	
		q7	Global	Will be checked for events.	
		q7	Global	Will be checked for events.	