CONNECTING WS WITH TAVERNA

1. Installation

Download and "unzip" Taverna from http://taverna.sourceforge.net/index.php?doc=download.html .

Note for *Linux* users: *Taverna* uses the *GraphViz* library. This one is included in the zip for the Windows distribution, but if you are running *Linux* you have to download it separately. For *RedHat* based distributions, a .rpm is available at http://www.graphviz.org/Download linux.php

For other distributions, sources are available at http://www.graphviz.org/Download..php

2. Creating a very simple workflow

2.1. Make your WS available in Taverna

This can be done in two ways:

- Temporarily: Right click on the root node named Available Processors in the Available Services pane.
 Then select the collect scavengers from web item, and enter the URL your services are available at.
 The software will perform a Web crawl, and add a node containing the services found at the address you entered.
- In a permanent way: You have to edit the *mygrid.properties* file located in the *taverna_root_dir/conf/* directory. In the section called *DEFAULT SERVICES*, add a line with the same form than others and starting with the type of address you enter. In our case, for services available on an application server you must add:

taverna.defaultweb = http://random.scs.fsu.edu:8080/axis/services

2.2. <u>Using your services in a workflow</u>

This can be done in a very simple way, just by dragging (from the *Available services*) the services you want to integrate in the workflow (they are represented by colored chips) and dropping its in the *Processors* node in the *Advanced Model Explorer* pane.

If you expand the node you just created, you can see input and output available for you service. Input are represented by a little circle with an incoming arrow, and output are represented in the same way but with an outgoing arrow.

Now you need to add input(s) and output(s) to your workflow. Just right-click on the input or output node, select *Create new input* or *Create new output*, and then enter the name you want for your I/O. Finally, connect all the workflow elements. To do so, right-click on an element and choose to which other element's input its output will be connected.

2.3. Running the workflow

Click on the *Tool and Workflow Invocation* menu in the top of the main Taverna window. Select the *Run workflow* item. Then, in the new window, specify inputs to your workflow by clicking on the purple triangle and the on *New Input*. Alter the text *Some input data goes here* and type in your own input data. You can add several input data. When choosing the *New List* option, you can specify a collection of input data. The workflow will be applied on every data, one after the other.