PDT Skeleton Agent Framework HOW TO

We have provided a Prometheus Design Tool version of the Agent Framework which can be used.

Generating the code from PDT

1. Open the climacode.pd file from within the Prometheus tool.
2. All changes to system design can be done from here. Any objects which are marked as "*External to system"* will not have code generated for them.
3. From the "*Tools"* menu, select "*Generate Code"*
4. Choose the code generation directory to match the location of the previously generated files. This is very important to ensure that any code manually entered is not lost.
   Note: This should be the directory containing the JACK directory, not the JACK directory itself.
5. Click generate and check for any errors. If there are any problems at this stage, please post a message on the blackboard discussion board ASAP so that this can be rectified.

Compiling the code

Manually compiling:

1. We have provided compile scripts for both Windows and *nix systems which are named compile-code.bat and compile-code.sh respectively
2. These scripts have been updated so that they now perform a *clean* of the compiled class files first so running them should be all you need to do.

Using Eclipse:

1. Eclipse can be used to make any changes to the generated code. It is important that no alterations are made to the code between the "DO NOT EDIT" comments.
2. An ant script has been provided which can be used in Eclipse. It is necessary to run both the "remove compiled files" and "compile" functions to completely recompile the code.

Starting the CLIMA server

The CLIMA server can only be run on a *nix system. Because there are likely to be several students running the server on Yallara or Numbat at the same time, it is necessary to run the server on a unique port.

1. As the port needs to be set in several of the server's files, a script has been provided to do this for you. The script "setmyports" can be run as follows:
   ./setmyports <RMI port> <Server port>
   where RMI port is between 1900 and 65000 and is only used internally for the RMI registry. The server port is the port which your agents will connect to.
2. Once the ports are set, running "./startserver" will start the server. Assuming all goes well, the server should print "Waiting for agents..." at which point you can connect your agents.

Running the agents

Scripts for running the agents on both Windows and *nix systems have been provided in the form of "run-participants.bat" and "run-participants.sh" respectively.

1. It is necessary to edit the HOST and PORT variables in this script to match the host and port on which the server is running.
2. Running the script should automatically initiate the authentication process to connect your agents to the server. Once this is complete, and any opposition agents are also connected, pressing "Enter" on the server terminal will start the simulation.

3. The output from the simulation is written to a directory inside the output folder on the server as SVG files which can be viewed using Internet Explorer and the SVG plugin.