Grid Computing

Exercise 3

The Globus Calculator

Last weeks tutorial introduced the tools required to build, deploy and invoke a simple Globus Web Service. The simplicity of these tools masks the complex underlying behaviour, and it is necessary to cultivate familiarity with these tools in order to speed up the development process. To prepare for the Programming Assignment, we need to be able to perform additional functions to make our services more useful. In this exercise you will be asked to build a standard Globus calculator, utilising *stateful* Web Services which can remember some internal value in between invocations.

You will be required to work through **Chapter 3** of the standard Globus GT4 Tutorial. You are encouraged to read as much of this document as possible, as it contains a wealth of information about the features of Web Services which can't be covered in the coursework. This tutorial is available as a .pdf file in your home directory (on the NeSC lab machines) and is also available online at:

http://gdp.globus.org/gt4-tutorial/multiplehtml/index.html

The tutorial example files are in your $HOME/tutorial directory. These contain the WSDL, WSDD, implementation and build files. It is a good idea to back up this directory to another location in your $HOME directory (e.g. ~/tutorial2) before you start the exercise, this way you can start from scratch again without having to edit any files.

Exercise:

1) Read through Chapter 3 of the GT4 Tutorial.
2) Build and deploy the Simple Calculator service (Chapters 3.1 – 3.6)
3) Demonstrate your working Calculator at Tutorial 3 in Week 5 (Friday 11am)

This exercise will be marked either 0 or 1. A mark of 1 will be given for a successful demonstration of the calculator at the Week 5 Tutorial (9th February 11am). A mark of 0 will be assigned for a failure to show a working service.