gEclipse

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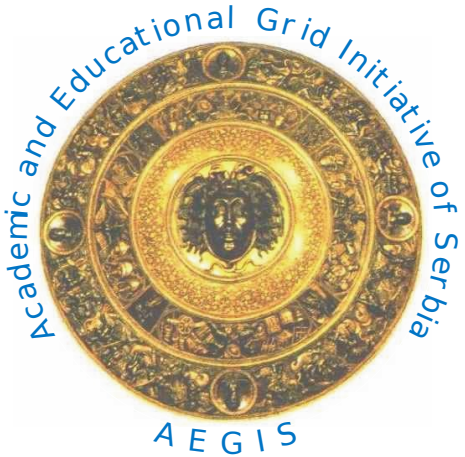

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Oct. 20, 2009

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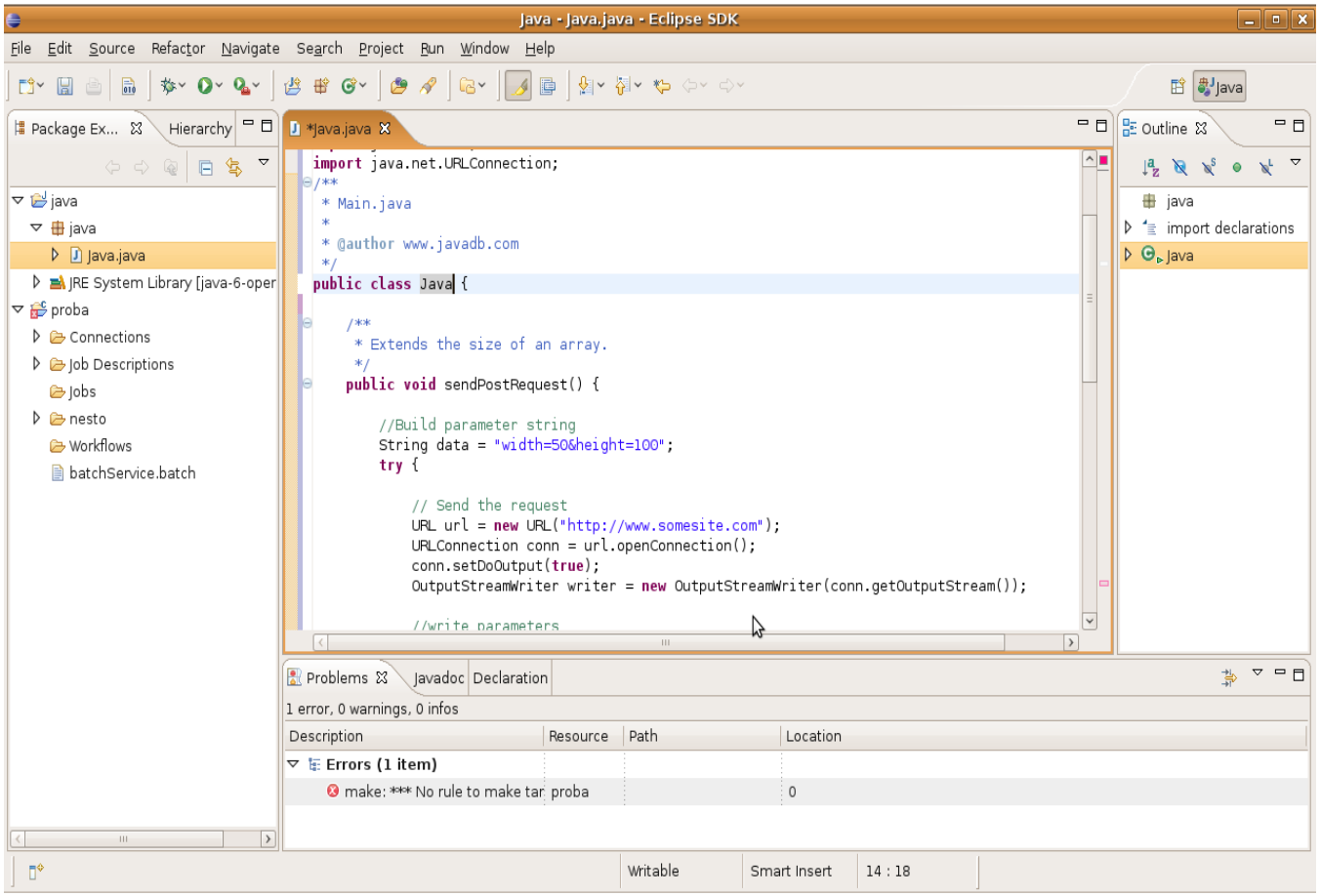
- Short overview of Eclipse
- Overview of gEclipse
- gEclipse features
- gEclipse setup
- Submiting job using gEclise

Overview Eclipse

- Eclipse is a multi-language software development environment
- Suports Java,C, C++, COBOL, Python, Perl, PHP
- Works on Mac, Linux, Windows



- Very powerful programing tool

Overview gEclipse

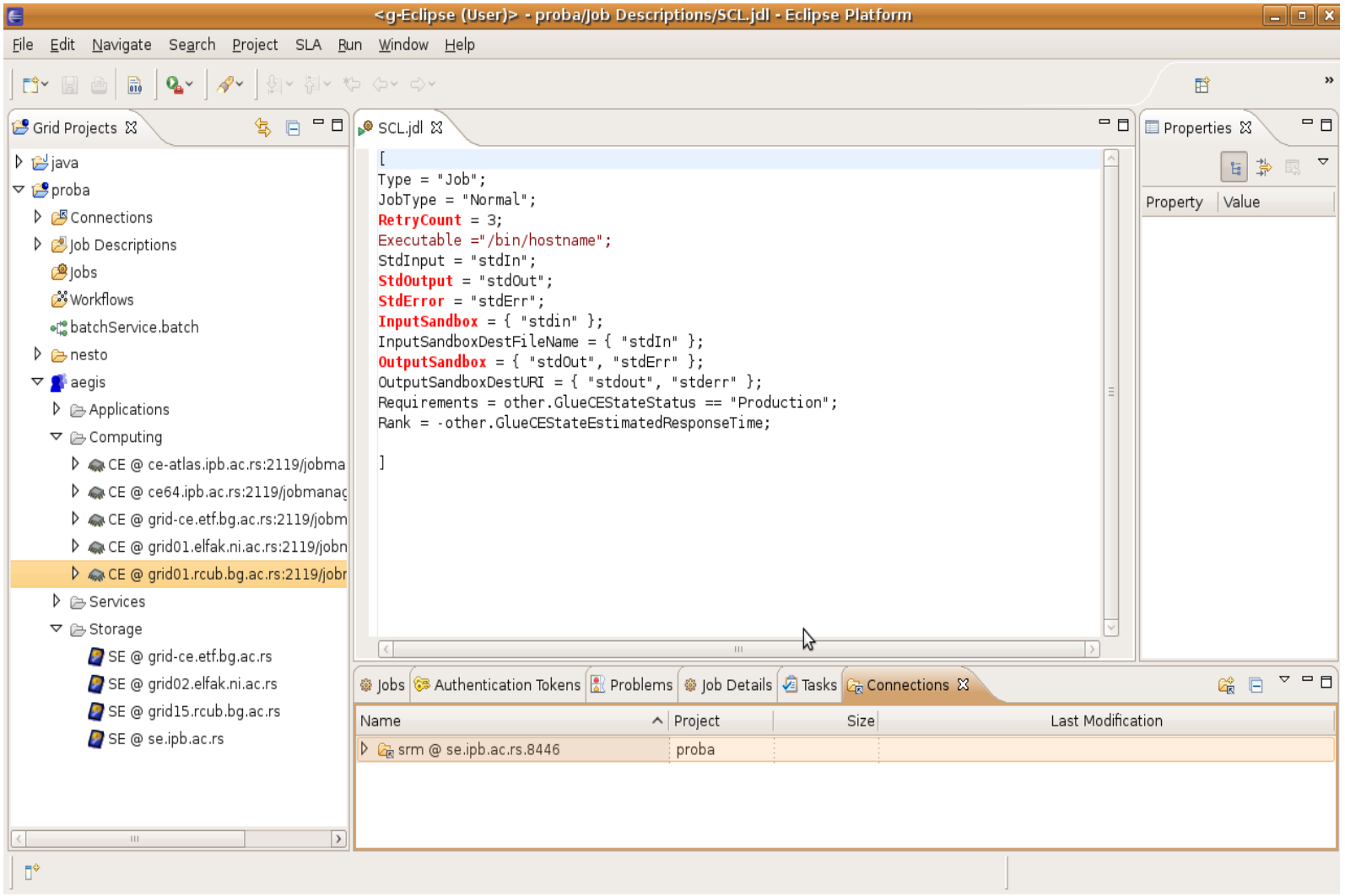
- g-Eclipse is an integrated open-source software platform based on Eclipse for Grid users, operators and developers.
- Currently g-Eclipse supports the **gLite**, **AWS**, **GLOBUS** and **GRIA** middlewares, implementing plugins for Virtual Organisation management, job and file management, infrastructure and application monitoring, application deployment, data visualisation, and workflow design

gEclipse features

g-Eclipse provides three different Eclipse Platform Perspectives:

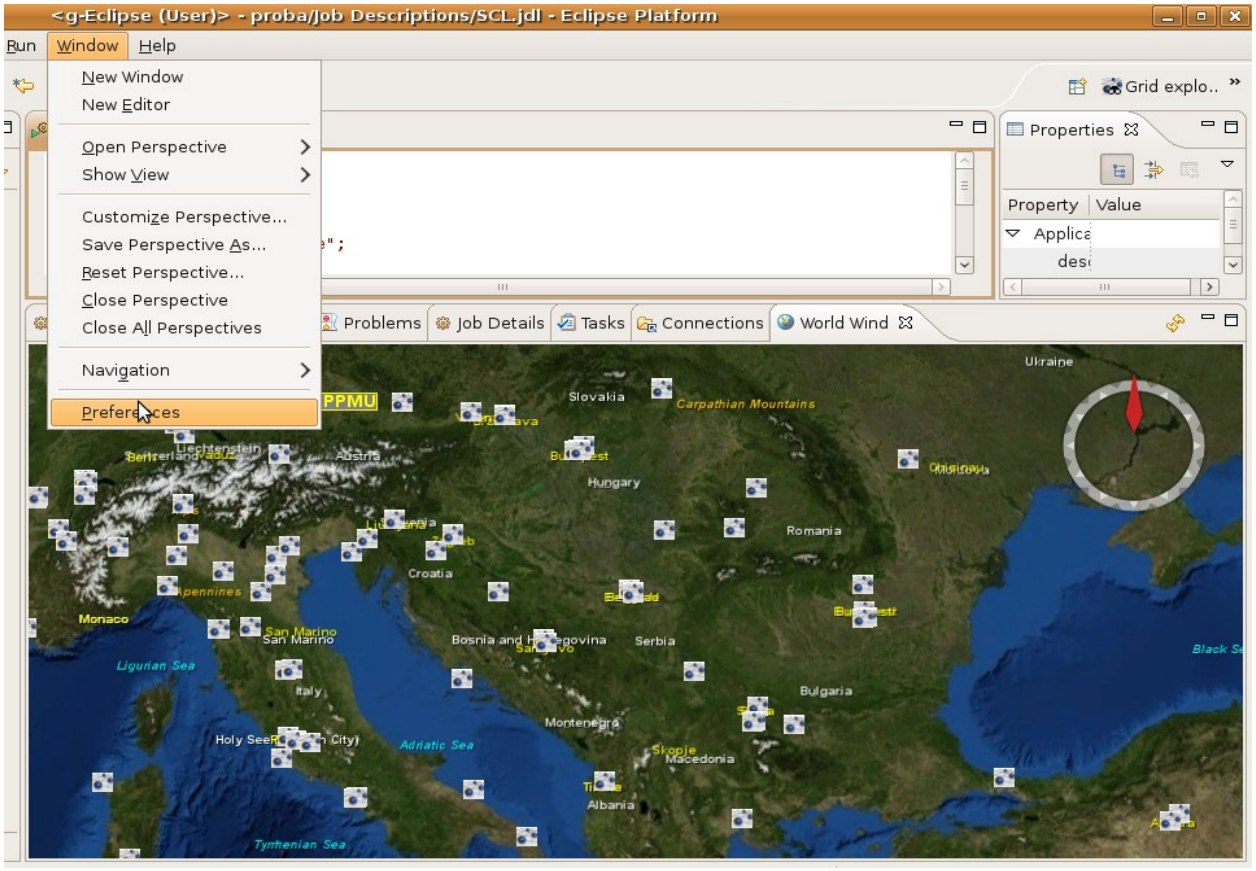
- **User Perspective** aims allow users to execute an application on the Grid, monitor the progress of the application execution and manage their data files on Grid.
- **Operator Perspective** - Grid infrastructure operators have a detailed knowledge about Grid infrastructure. The Operator Perspective should provide facilities for Grid operators to manage their local resources as well as the resources of the Virtual Organization to which they belong.
- **Developer Perspective** aims to provide application developers with the appropriate tools for program development, debugging, and deployment

gEclipse setup



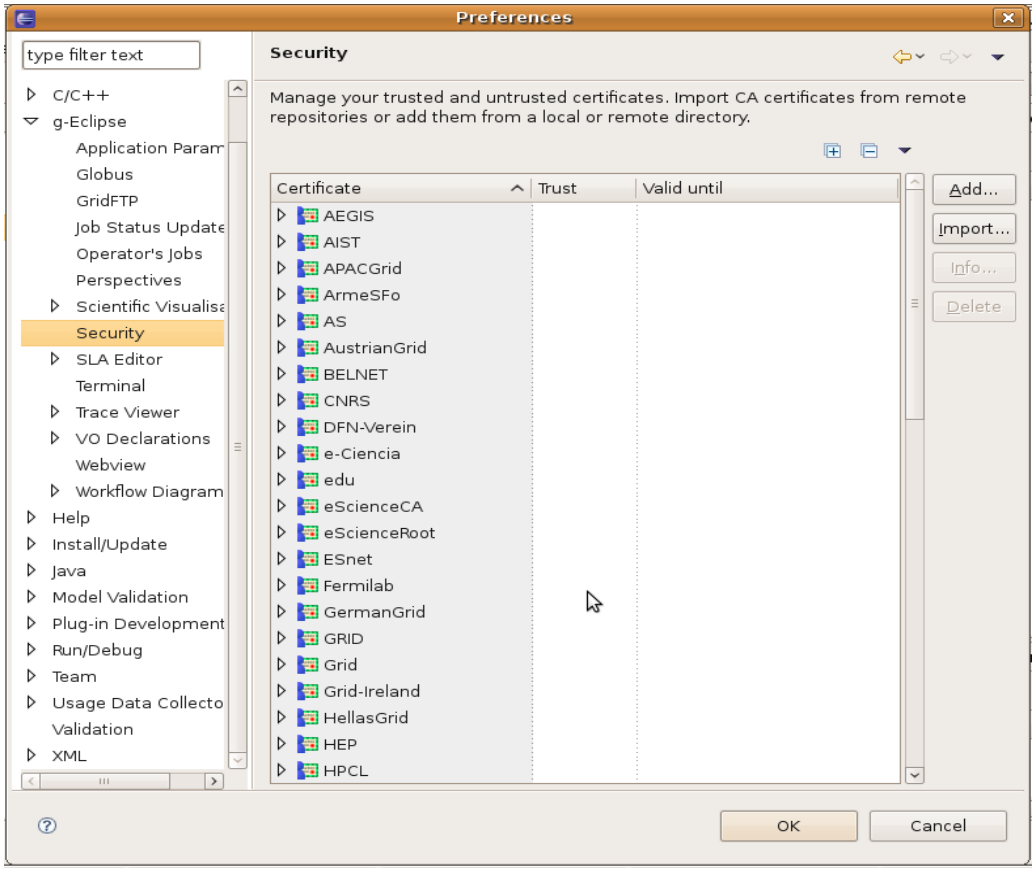
gEclipse setup

- First import VO into gEclipse
  - Importing the CA certificates:
  1. Go to **Window →Preferences**. . .



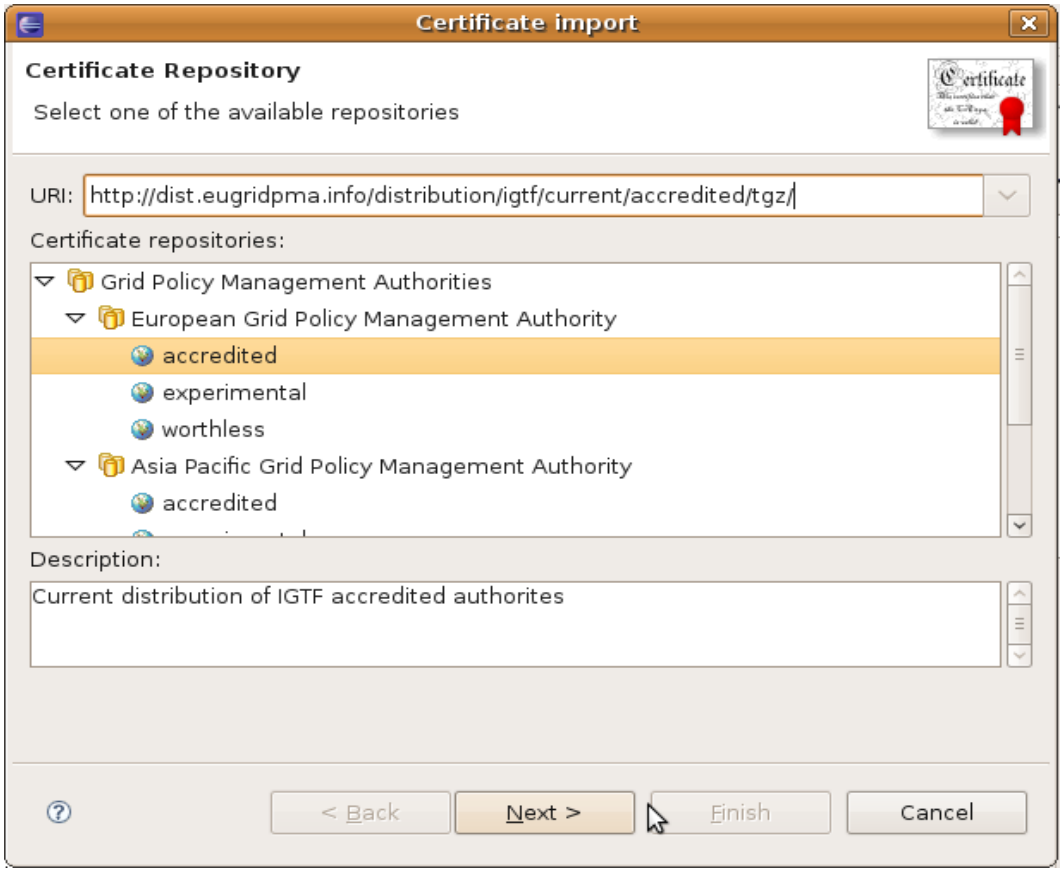
gEclipse setup

2. In the tree view on the left expand the g-Eclipse node.
3. Select **Security** and press **Import. . .**



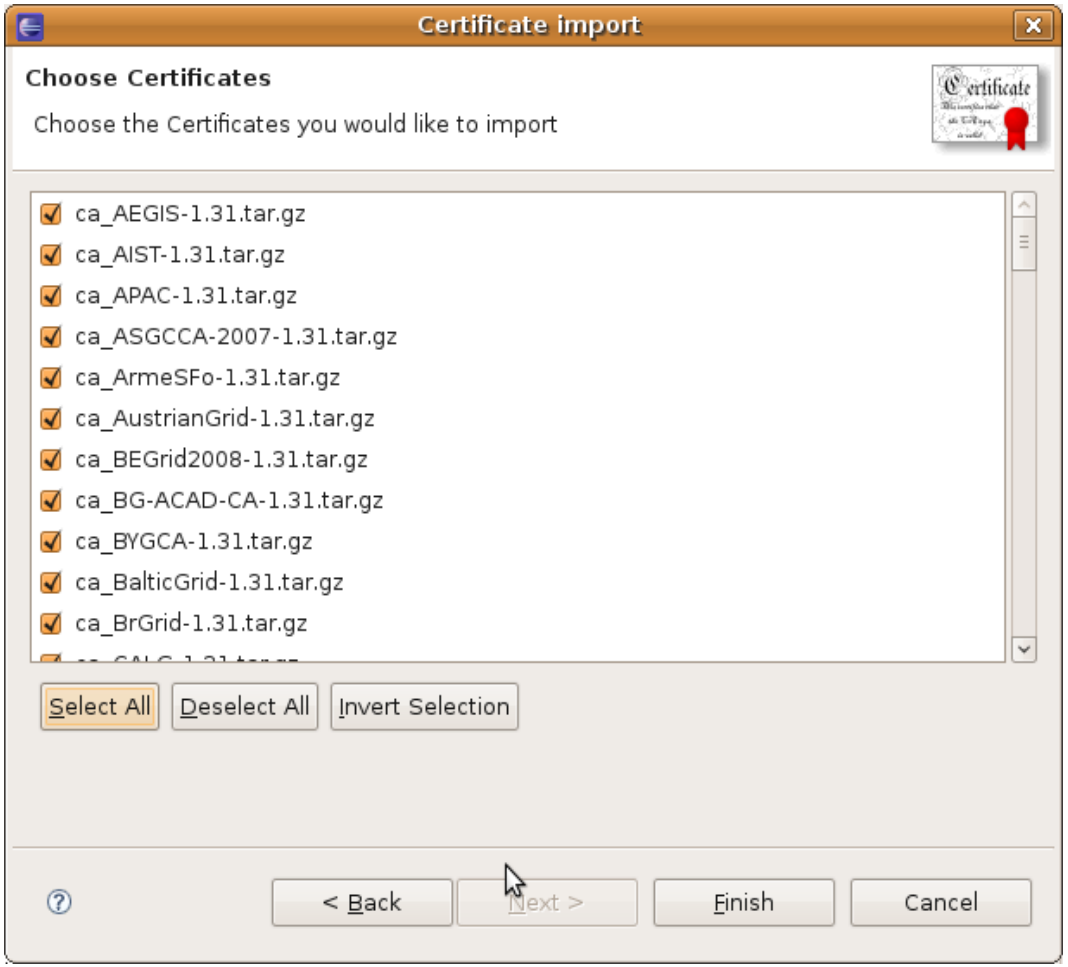
gEclipse setup

4.In the upcoming wizard choose the **European Policy Management Authority →accredited** and press **Next.**



gEclipse setup

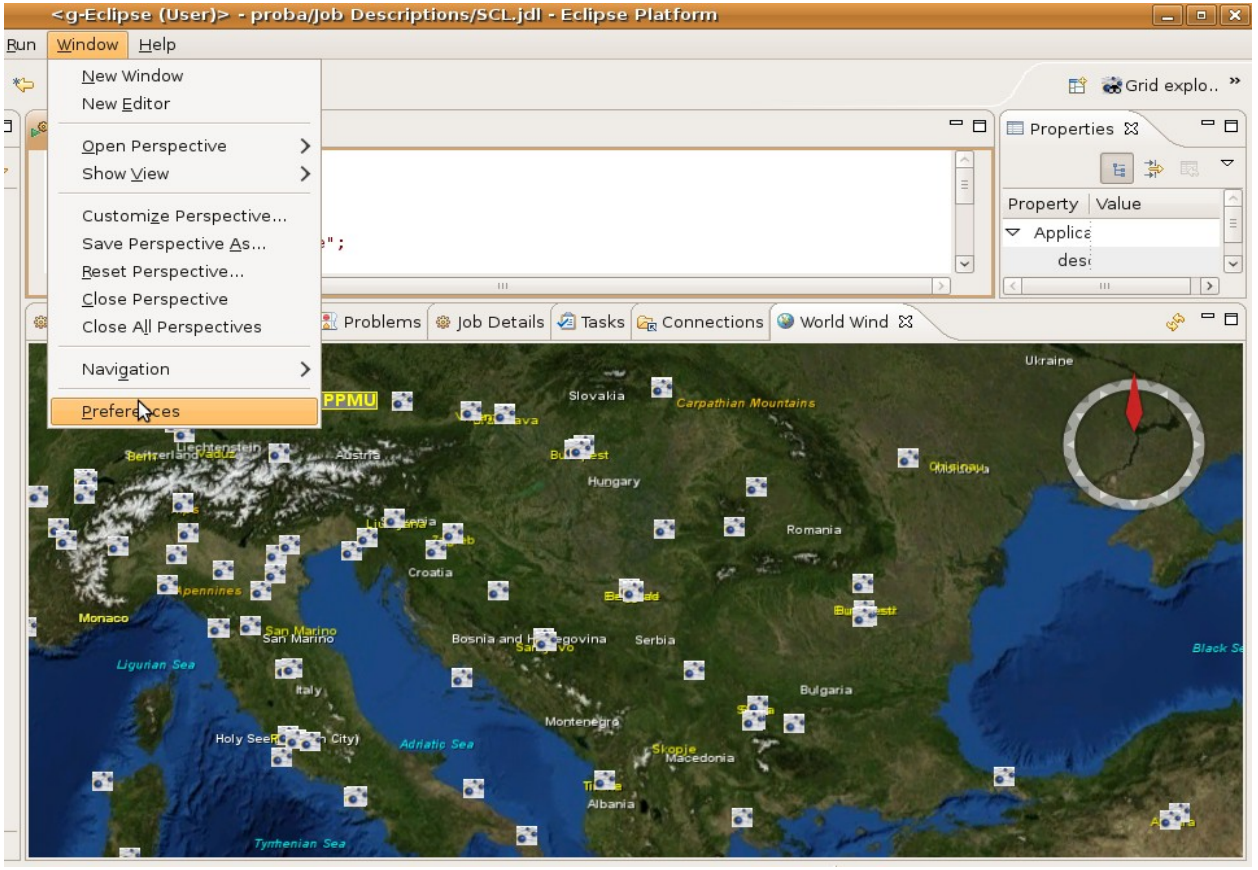
5. On the last wizard page press **Select All** and afterwards **Finish**.



gEclipse setup

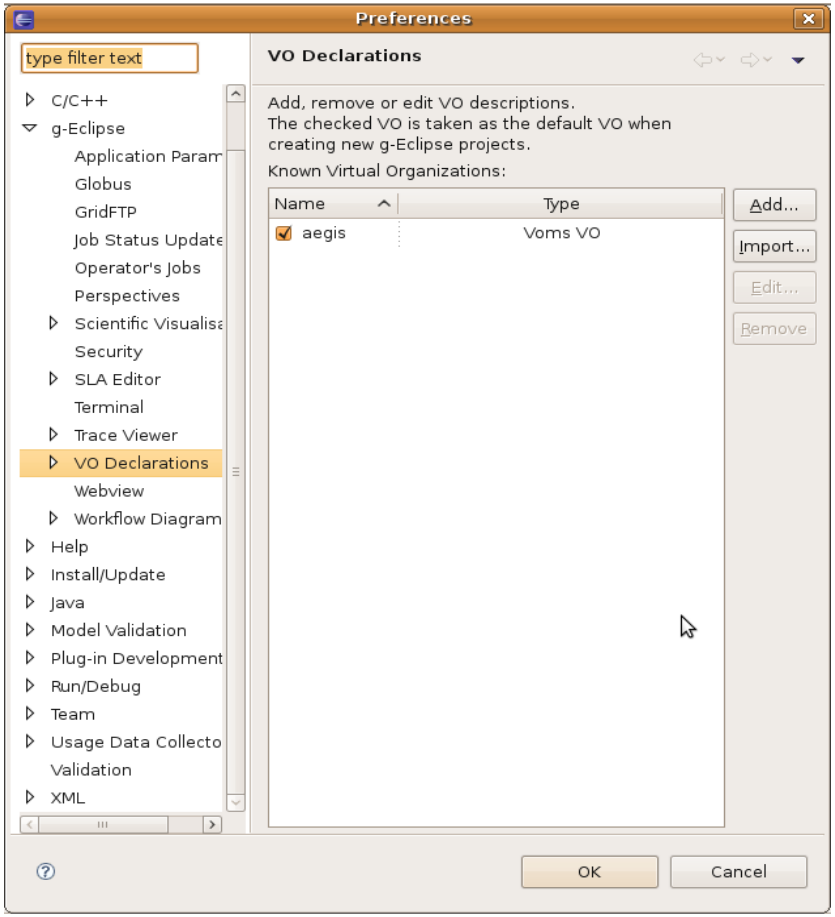
- Setting up a VO:

  1.Go to **Window →Preferences. . . .**



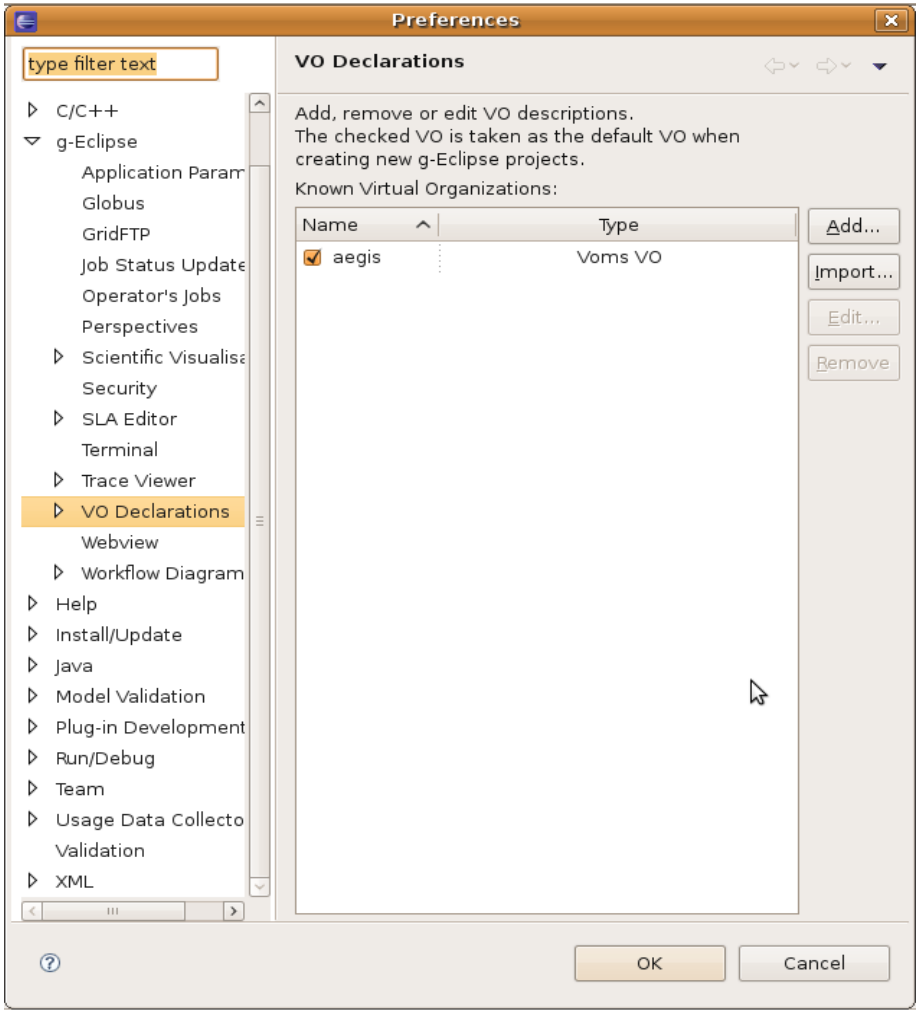
gEclipse setup

2. In the tree view on the left expand the g-Eclipse node.



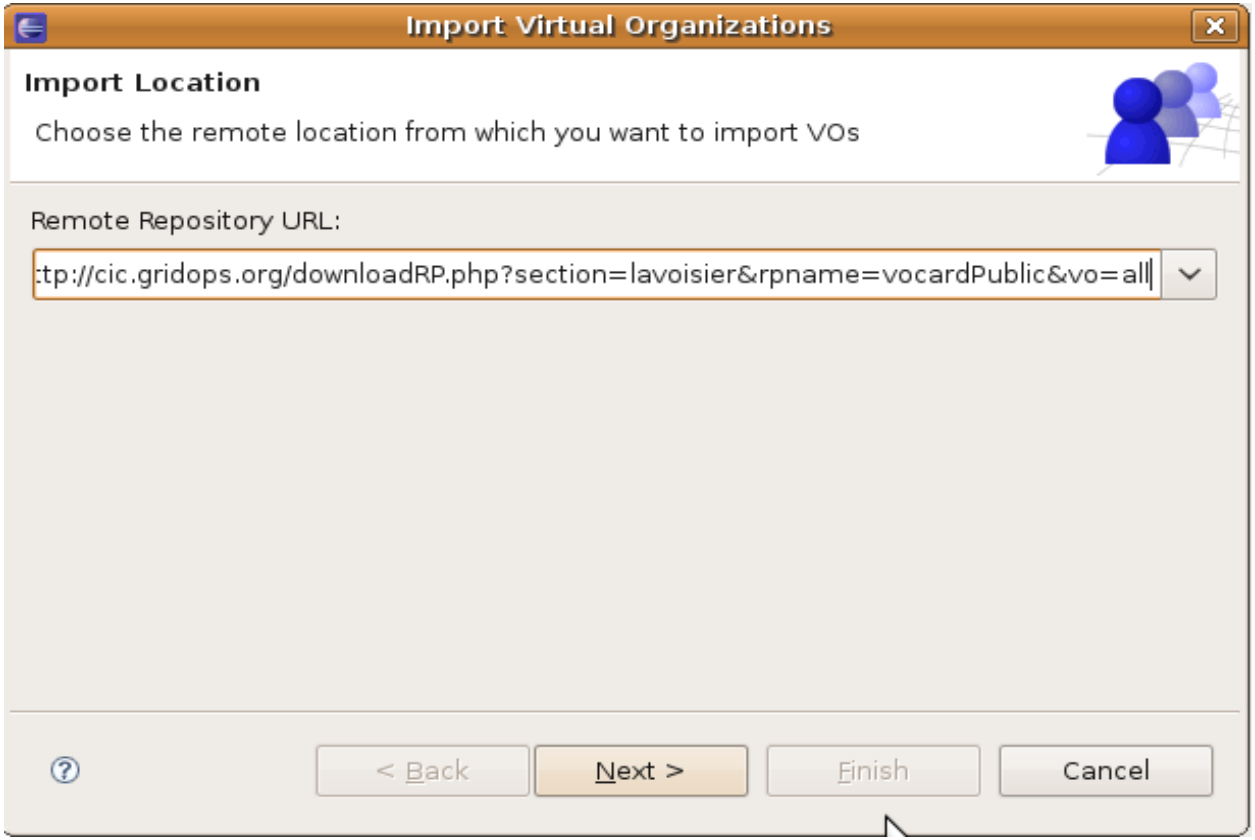
gEclipse setup

3. Select **VO-Declarations** and press **Import. . .**



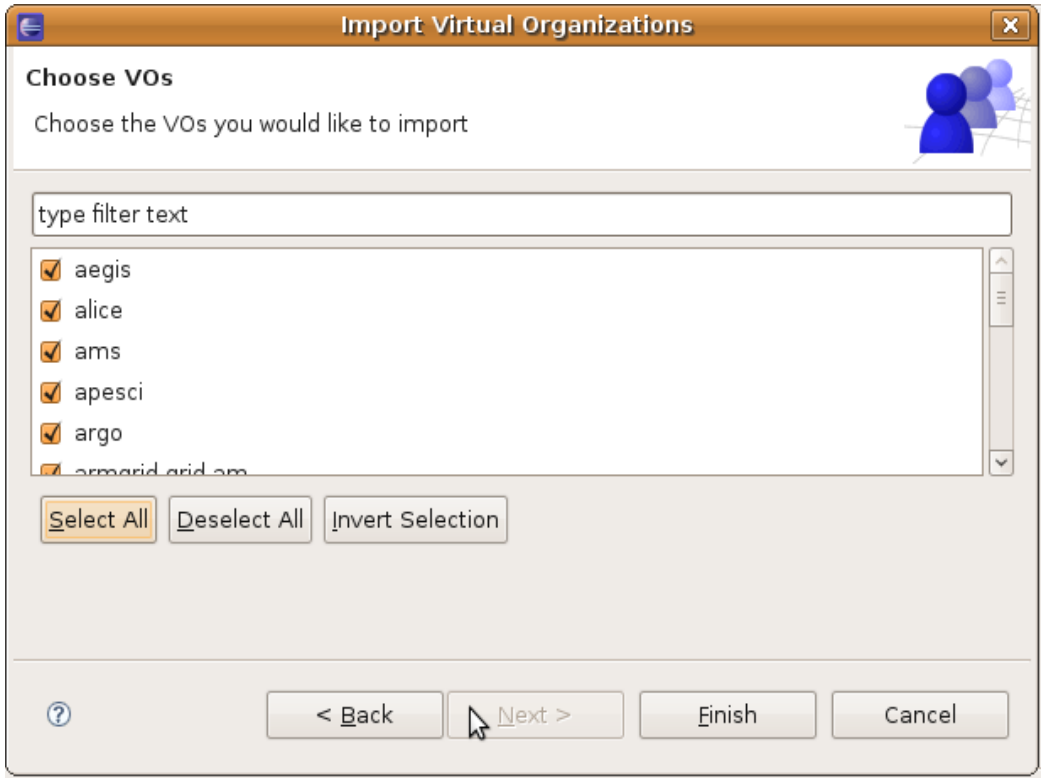
gEclipse setup

4. In the upcoming wizard page leave the repository URL as it is and press **Next.**



gEclipse setup

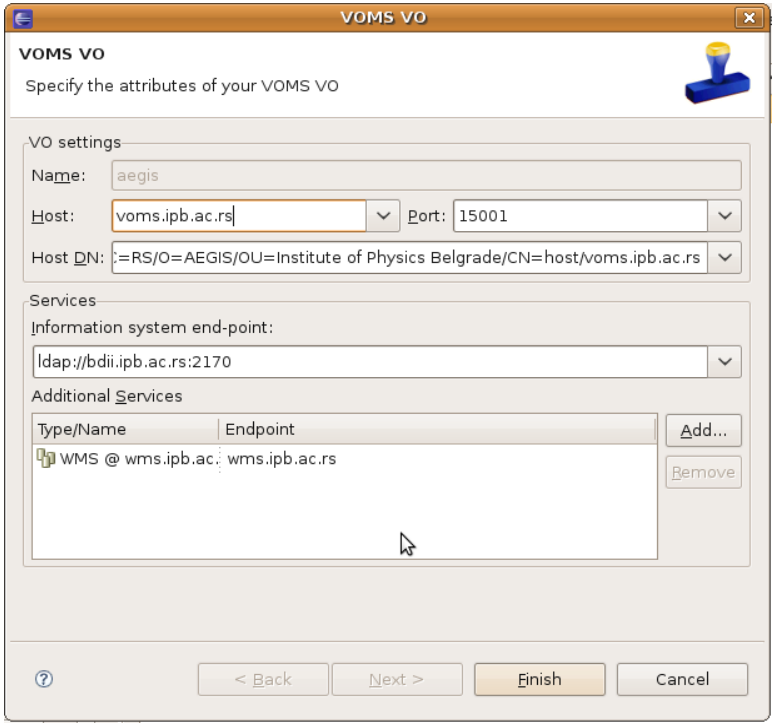
5. Select the **VO** you would like to import and press **Finish.**



gEclipse setup

6. Sometimes due to errors in the published parameters you may have to change some settings

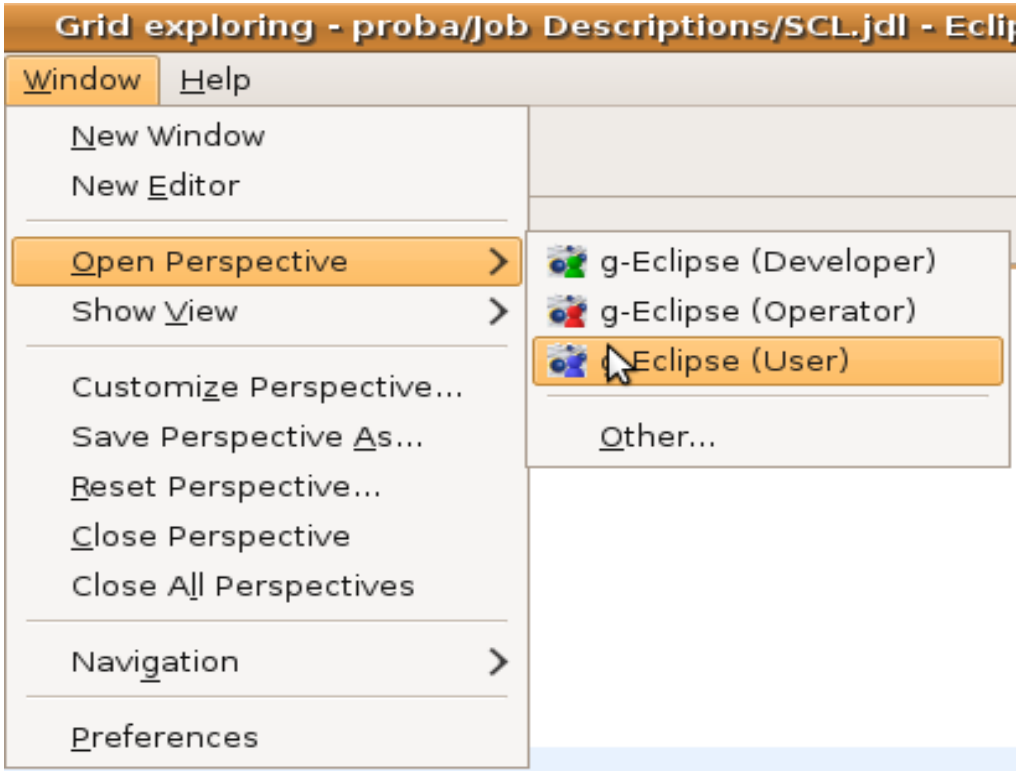
by hand after importing your VO. Therefore select the VO and press **Edit**. . . . Verify and if necessary modify your VO settings and press **Finish** when done.



gEclipse job submiting

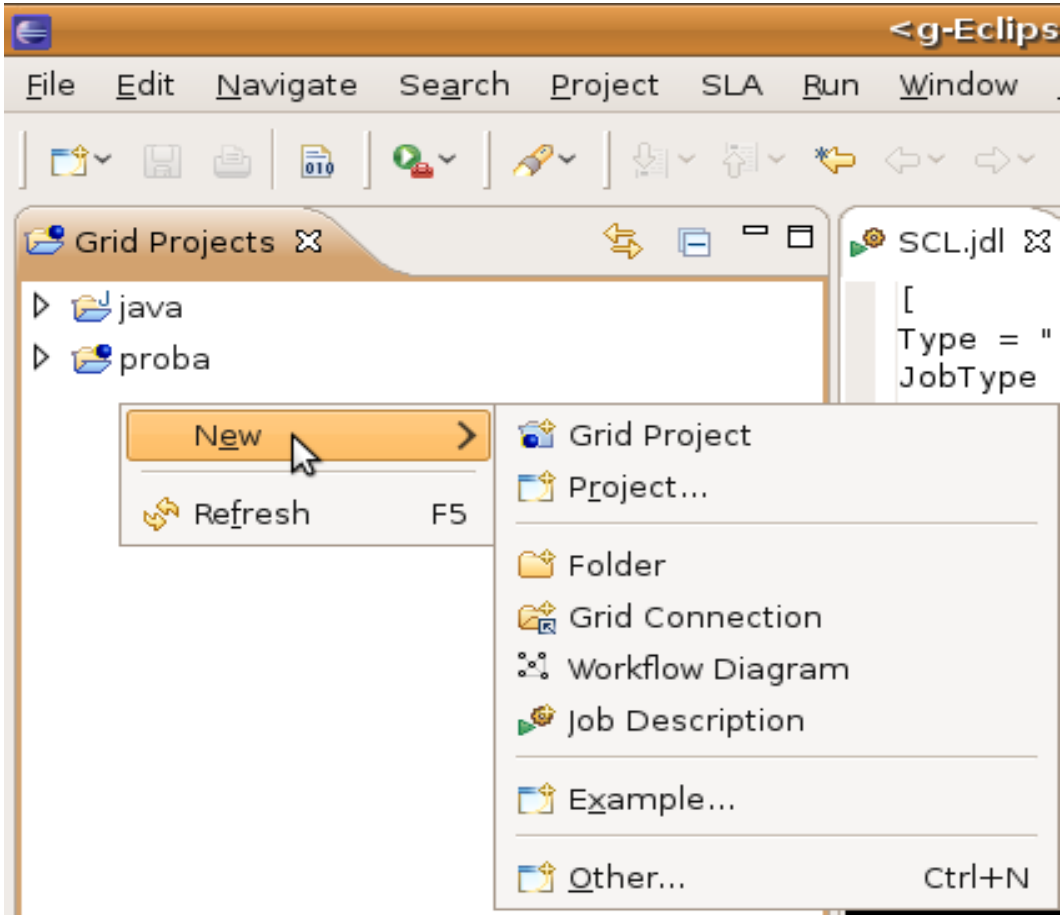
- Creating a Project:

  1. Select **Window →Open Perspective →Other**. . . . In the upcoming dialog select g-Eclipse (User) and press **Ok**.



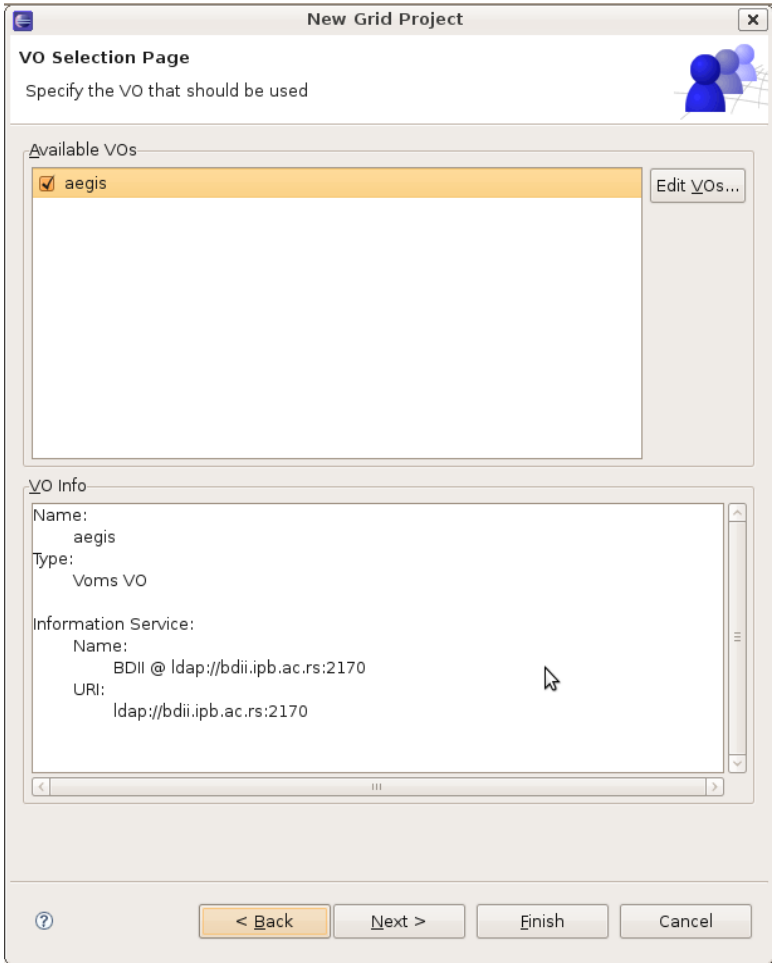
gEclipse job submiting

2. Right-click on the View titled Grid Projects and select **New →Grid Project**.



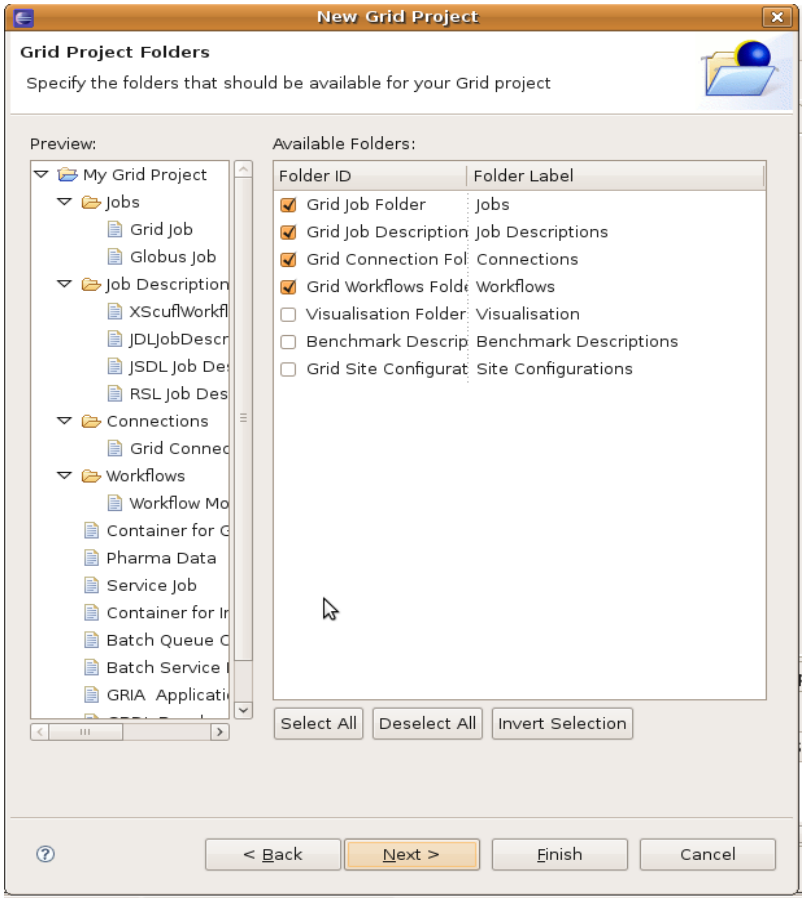
gEclipse job submiting

3. Choose a project name (SCL) and press **Next**.



gEclipse job submiting

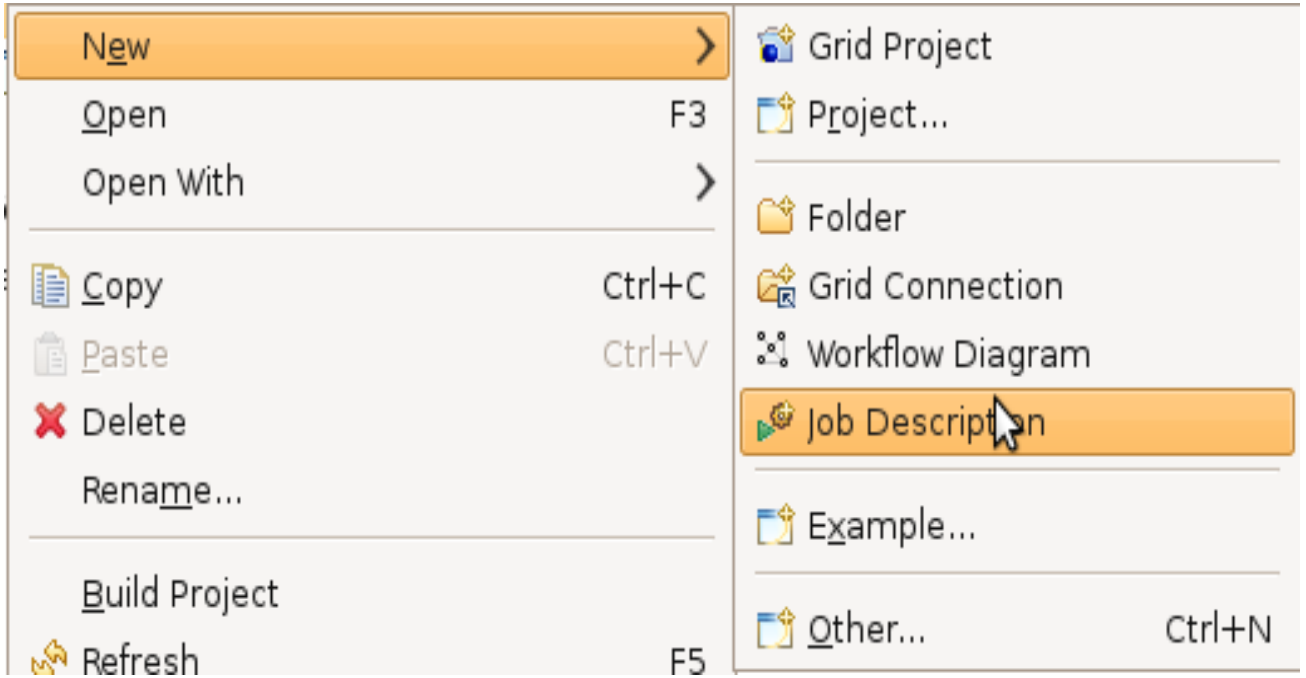
4. Select a VO for this project by activating the corresponding checkbox and press **Finish**



gEclipse job submiting

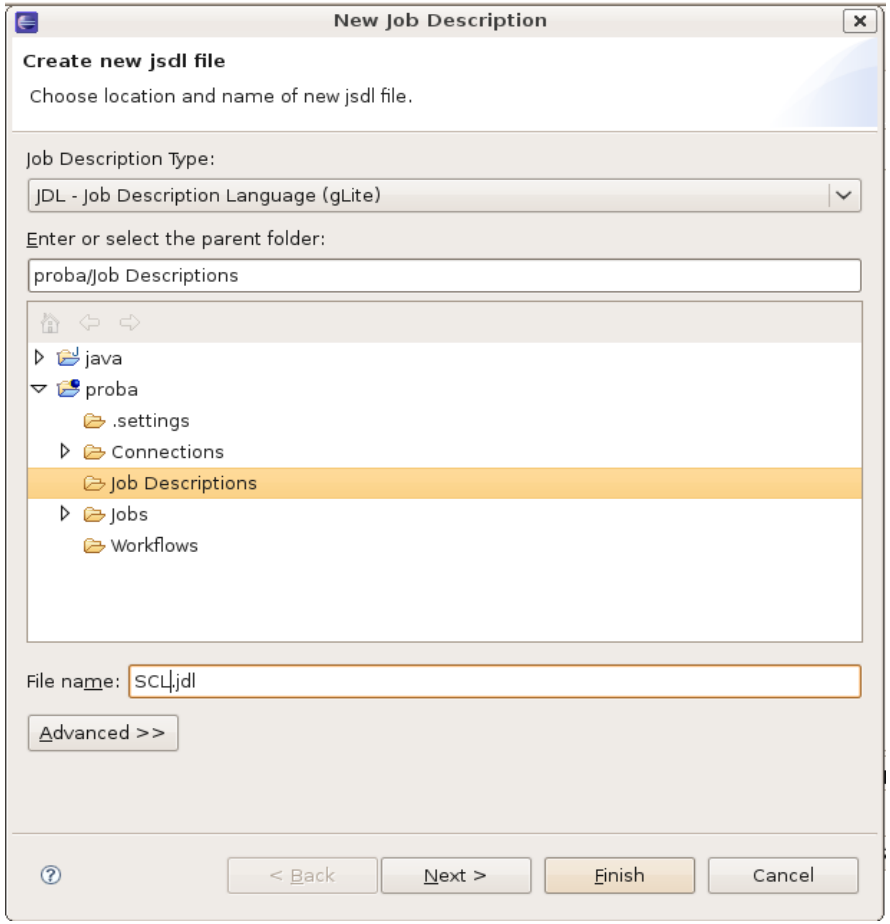
- **Submitting a Job Description File**

  1.Right-click the Job Descriptions folder of your Grid project and select **New → Job Description**.



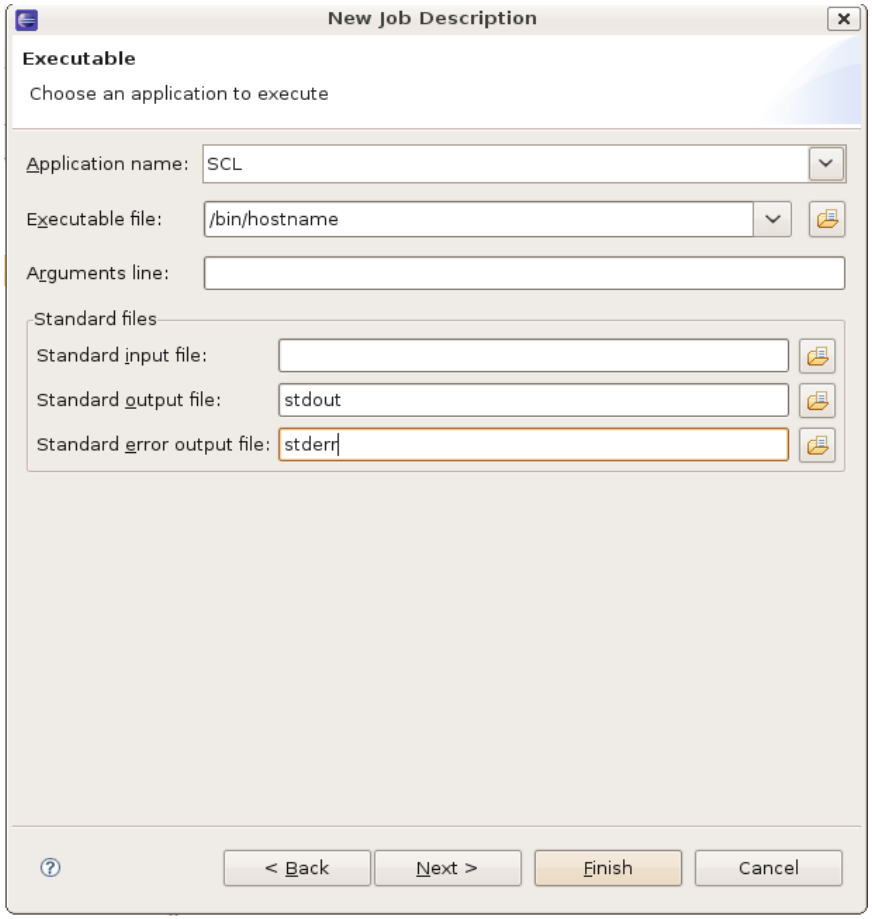
gEclipse job submiting

2. Enter a name for your job description file (SCL) and press **Next**.



gEclipse job submiting

3.Enter Hostname as Application name and /bin/hostname as Executable file

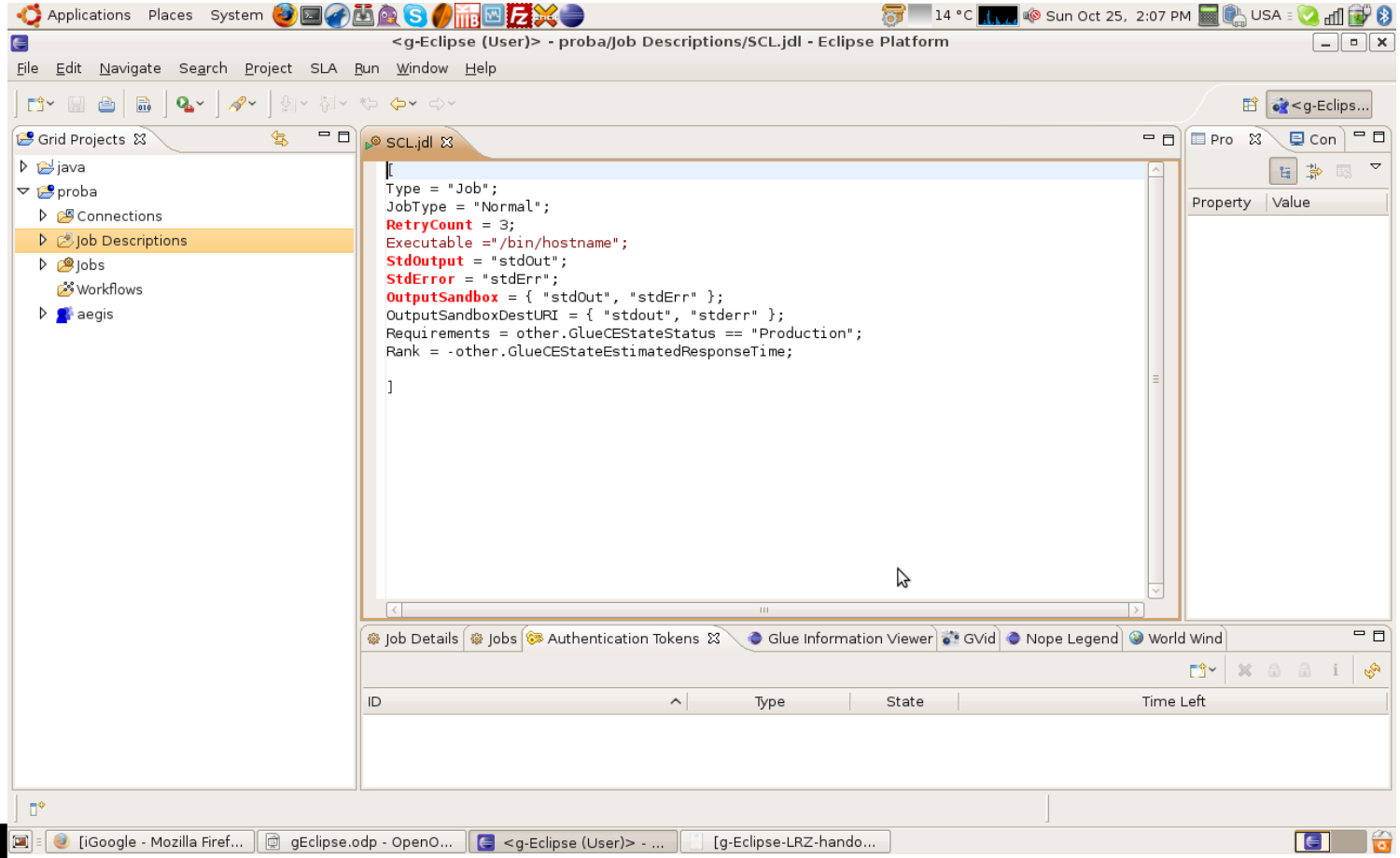


gEclipse job submiting

4. Click the button on the right of the Standard output file test field. In the upcoming file dialog browse one of your formerly created GSIFTP-connections and select any file that can be overwritten by the job and press **Ok**

gEclipse job submiting

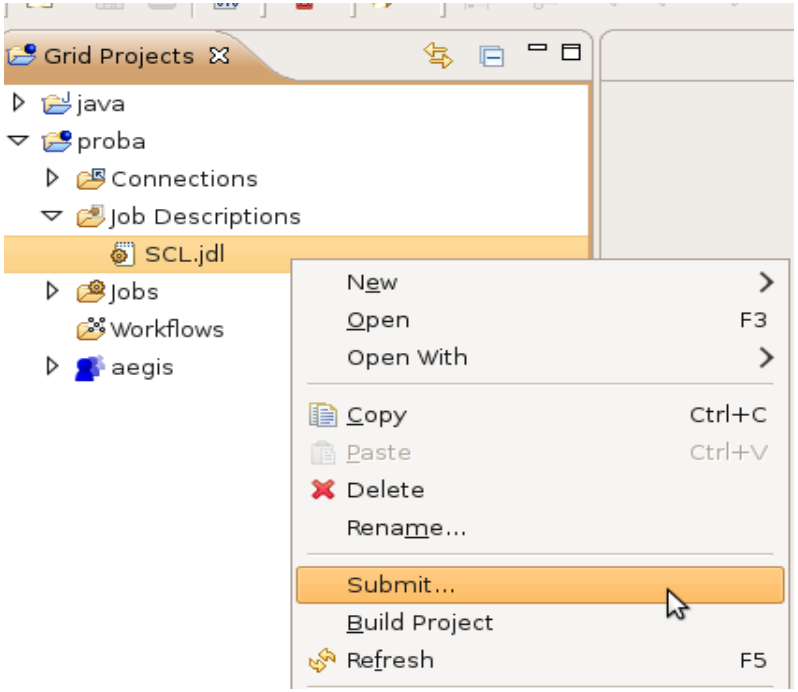
5.Press **Finish.** Now a JDL-file will be created and the JDL-Editor will be opened



gEclipse job submiting

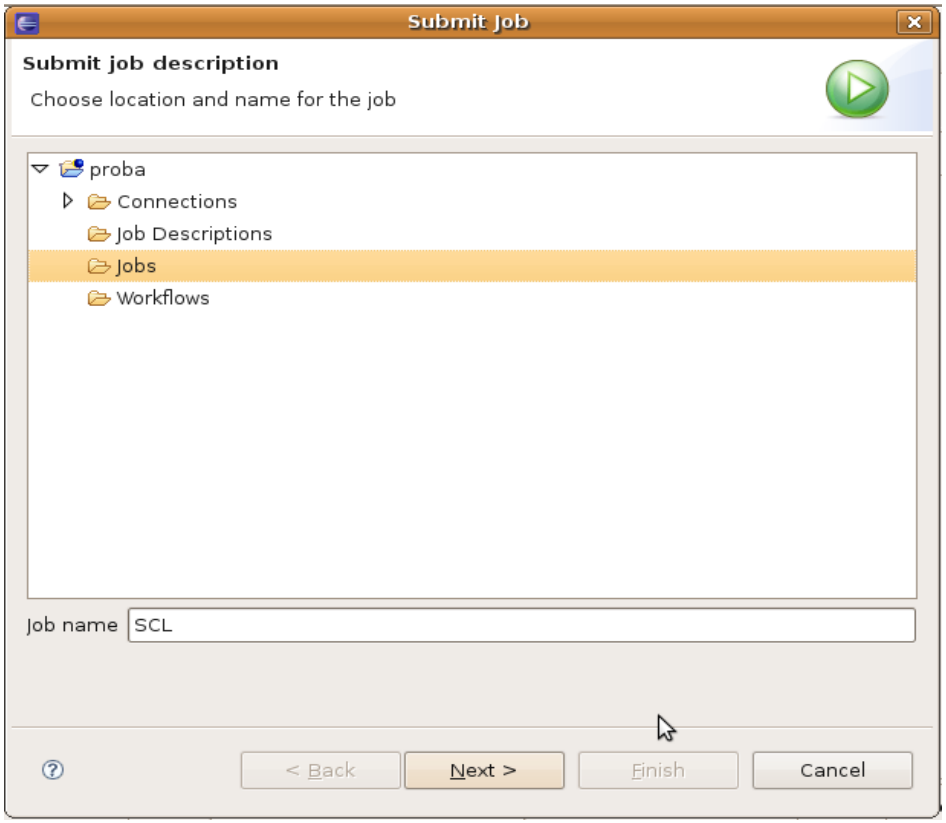
- **Submiting jobs**

  1. Once you have created and edited your JDL you may want to submit it to the Grid. Therefore right-click the JDL file in your Grid project and select **Submit Job**. . . .



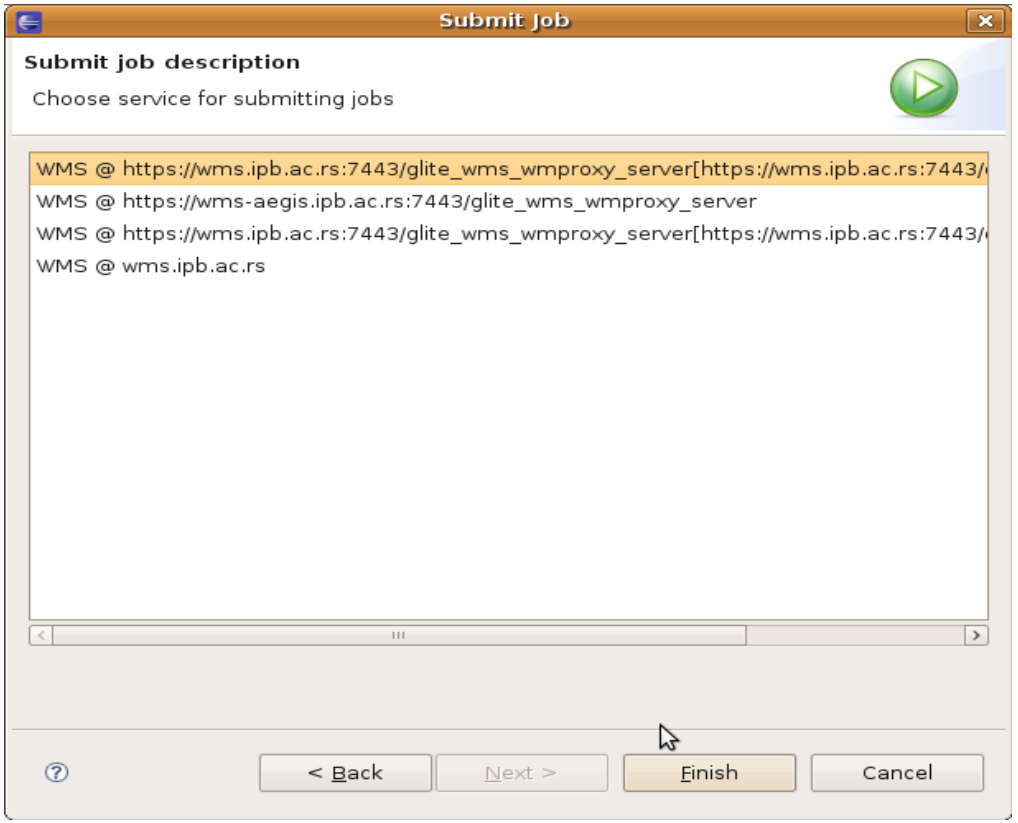
gEclipse job submiting

2. Choose a directory where a refernece to the job status information is stored (usually the Jobs folder in your project) and press **Next.**



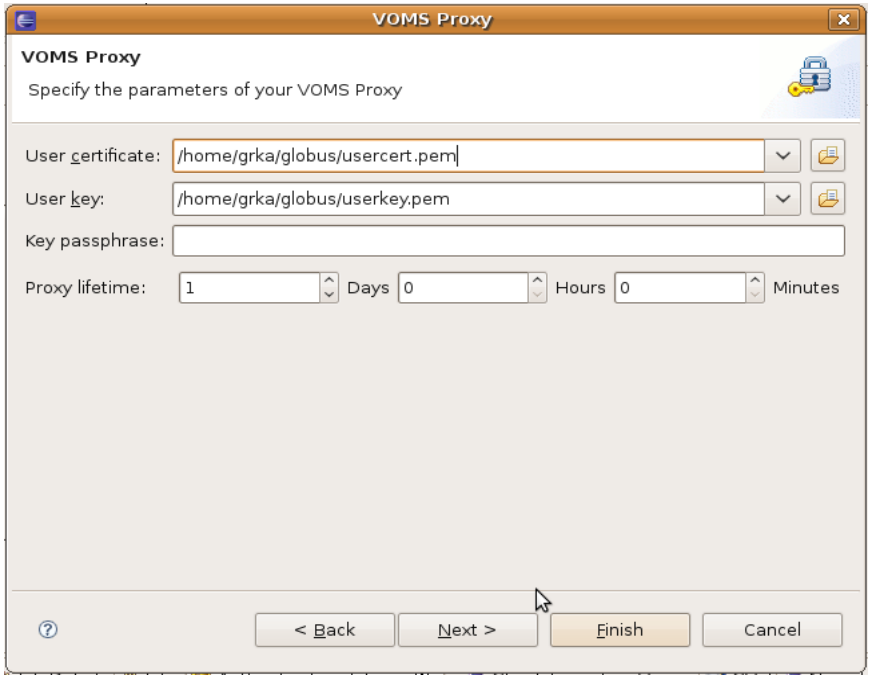
gEclipse job submiting

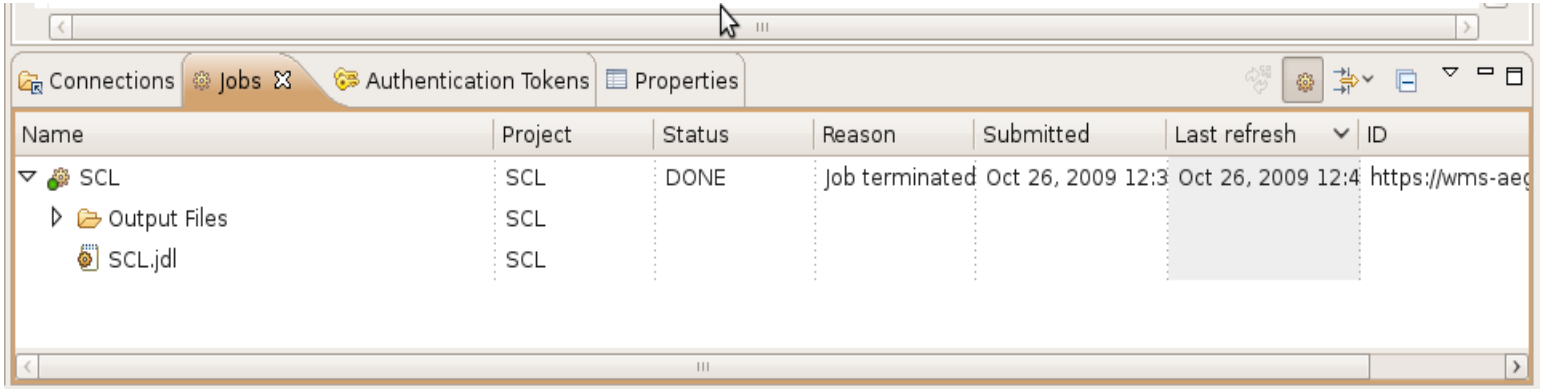
3. Choose one of the available WMS-services and press Finish. If you did not already create a VOMS-proxy you are asked now to do so.



gEclipse job submiting

4. After the job was submitted you may realise that it appears in the Jobs folder of your Grid project.The small decorator on the bottom left of the job icon gives you some basic information about the job's status.




Connections
Jobs
Authentication Tokens
Properties
Name
Project
Status
Reason
Submitted
Last refresh
ID
SCL
SCL
DONE
Job terminated
Oct 26, 2009 12:3
Oct 26, 2009 12:4
https://wms-aeg
Output Files
SCL
SCL.jdl
SCL

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