

the gEclipse platform: Installation – Grid Project Creation

Andoena Balla <andoena@cs.ucy.ac.cy>
Trainer, University of Cyprus



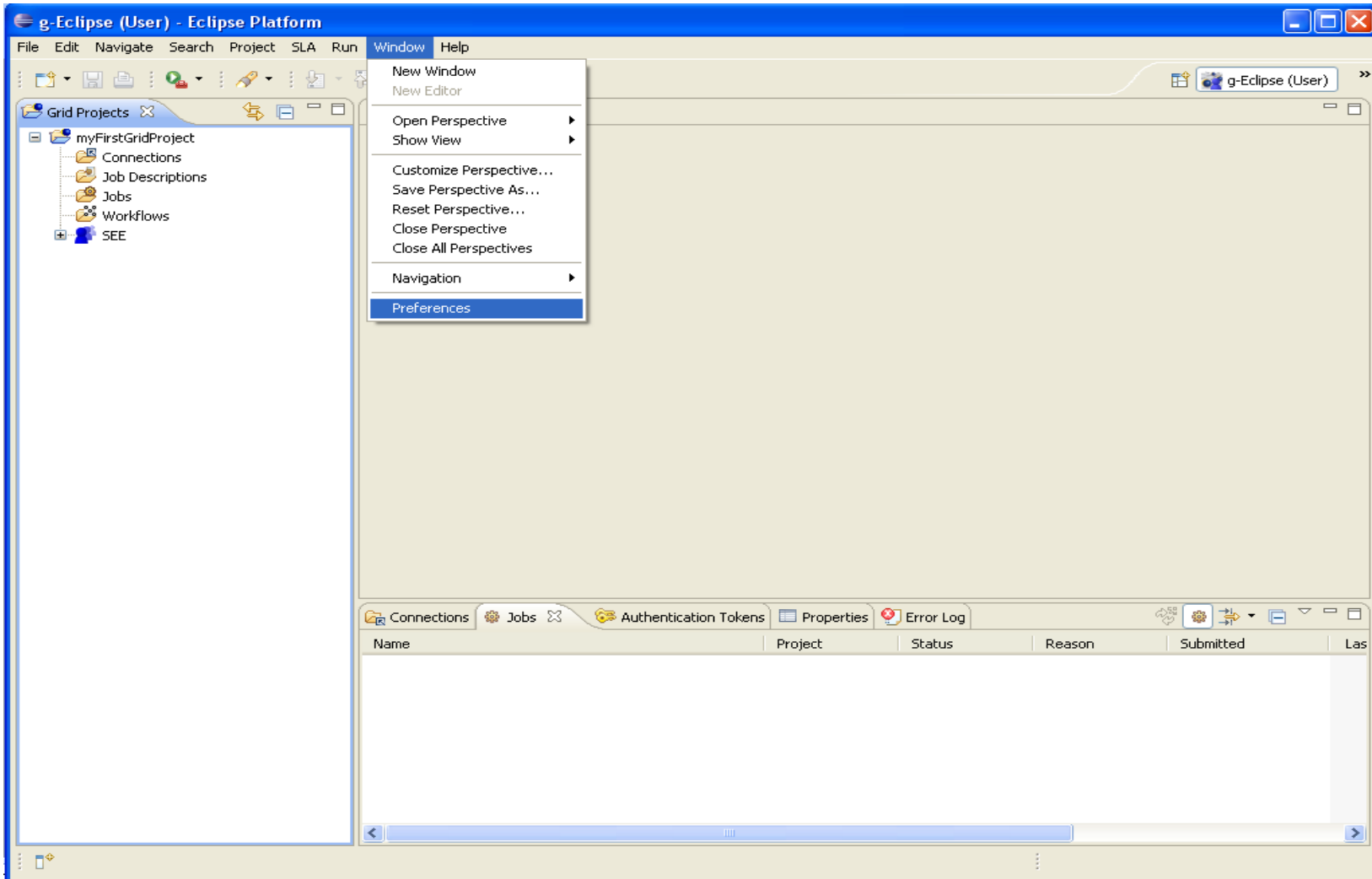
- The g-Eclipse framework provides a general, integrated workbench toolset for Grid users, operators and developers.
- It supports scientists to interact with Grid resources independent of the underlying Grid middleware.
- Main objective is to deliver an extensible framework for different Grid actors, by providing an unified abstraction of the Grid.
- The Grid abstraction enables Grid application users to access the Grid in a desktop-like manner with wizards specific for common use cases
- Also provides a set of visual configuration tools to maintain and configure Grid resources.

g-Eclipse - Getting started

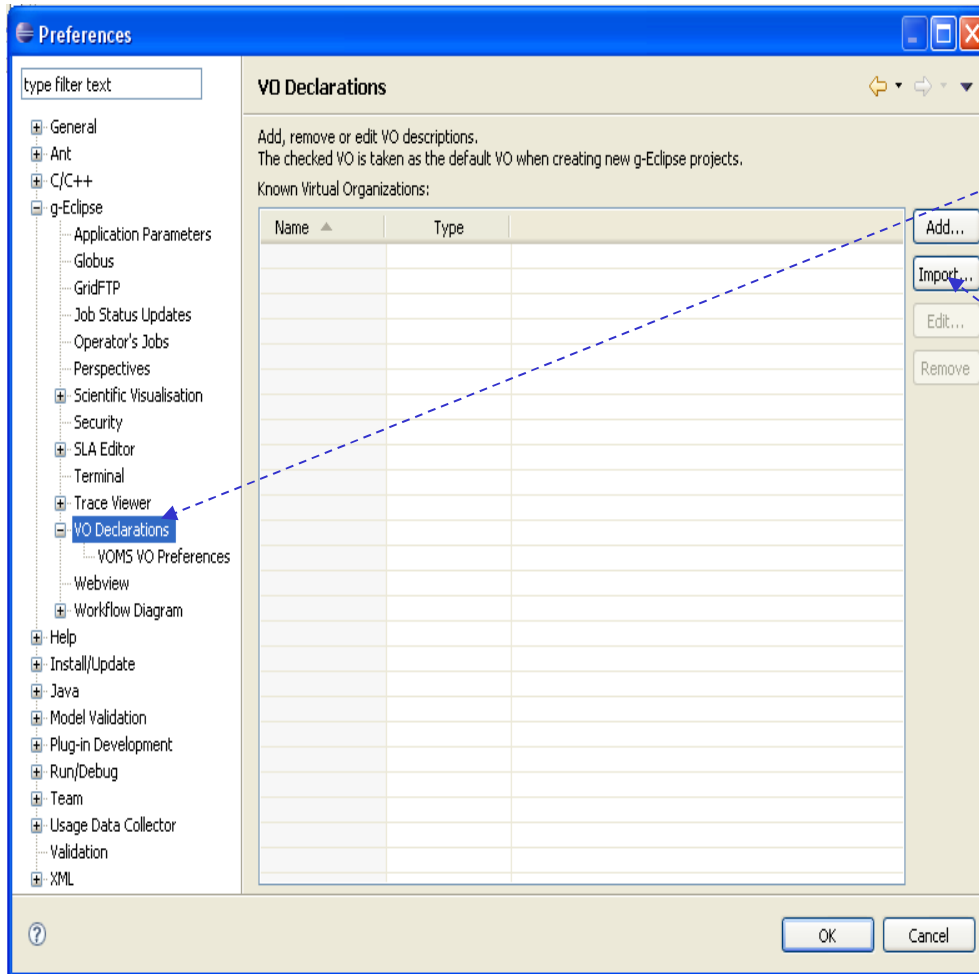


- The most important g-Eclipse preference is the declaration of at least one valid Virtual Organization (in short, VO).
- VO is a group of individuals or institutions who share the computing resources of a "grid" for a common goal
- Before someone starts using grid resources, she have to join one of these organizations, as they have an agreement with collaborating universities, institutes, and national labs to use their computing resources.

VO Settings (2)



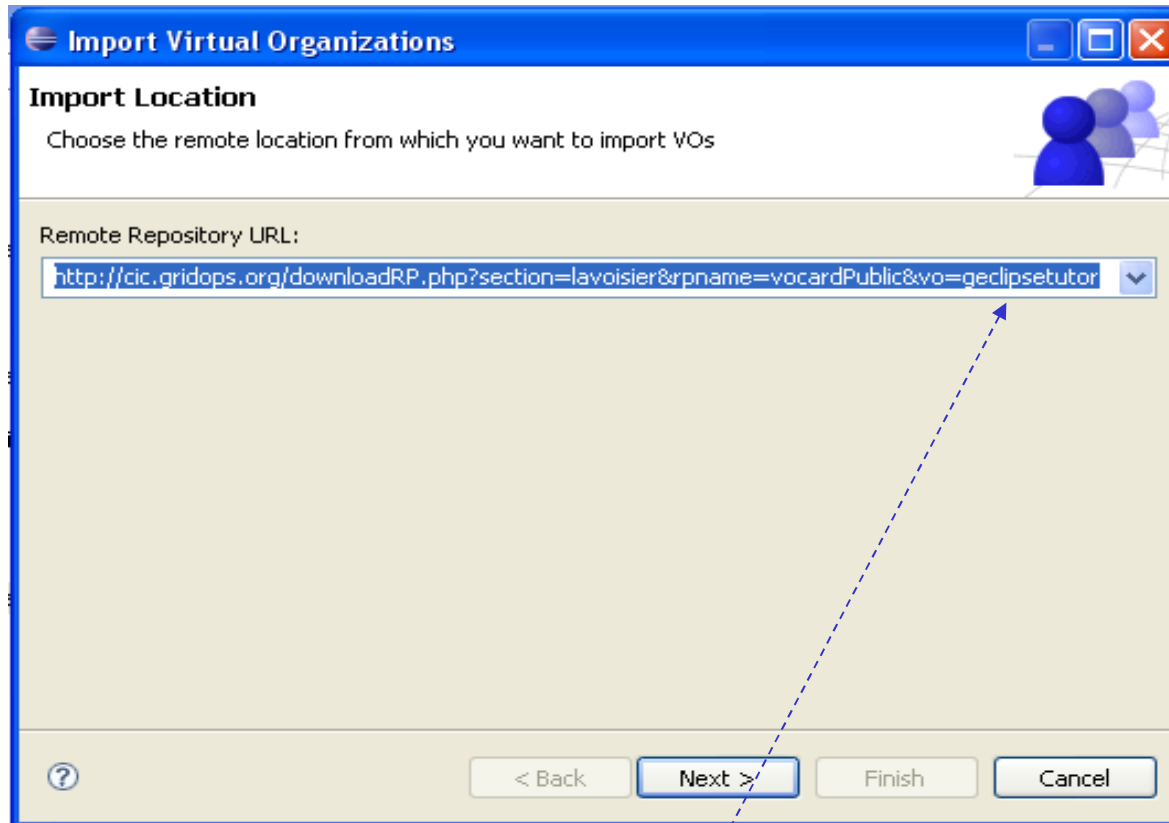
VO Settings (3)



- Choose Vo Declaration under gEclipse

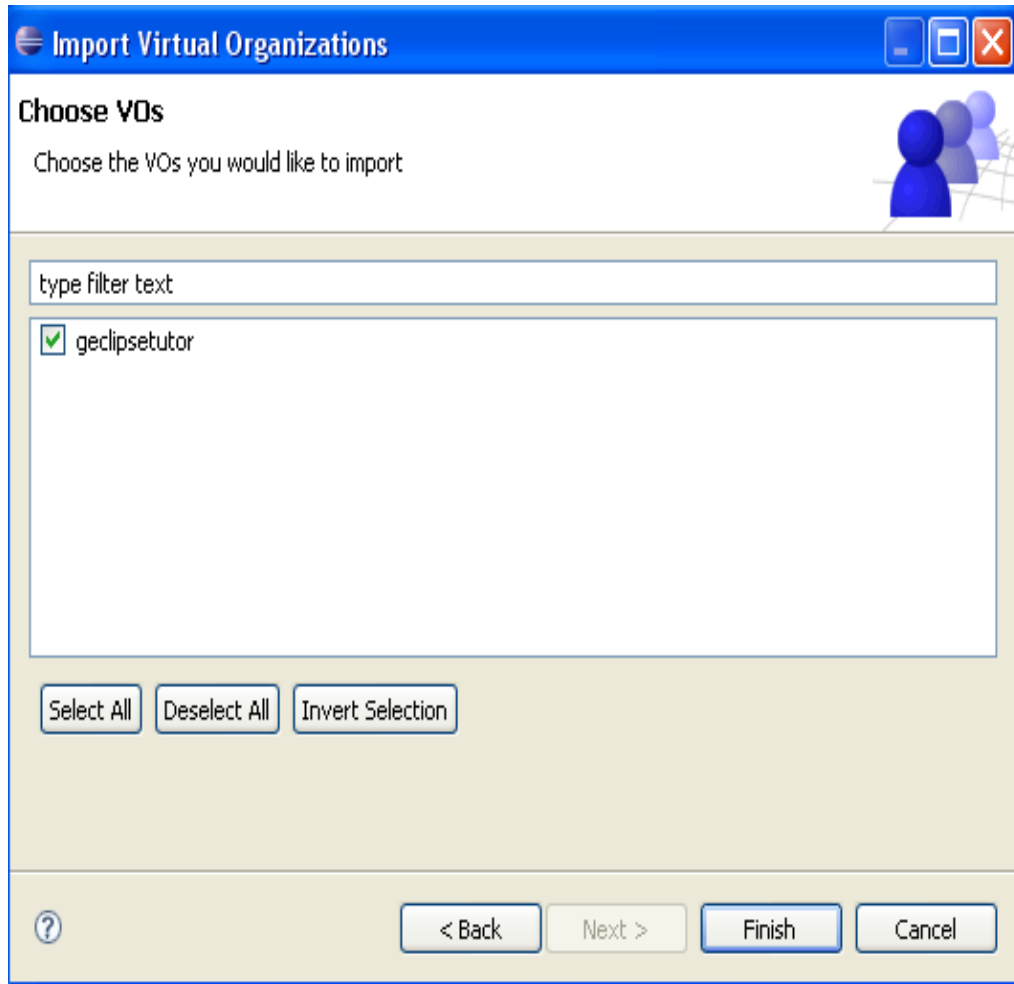
- Click Import

VO Settings (4)

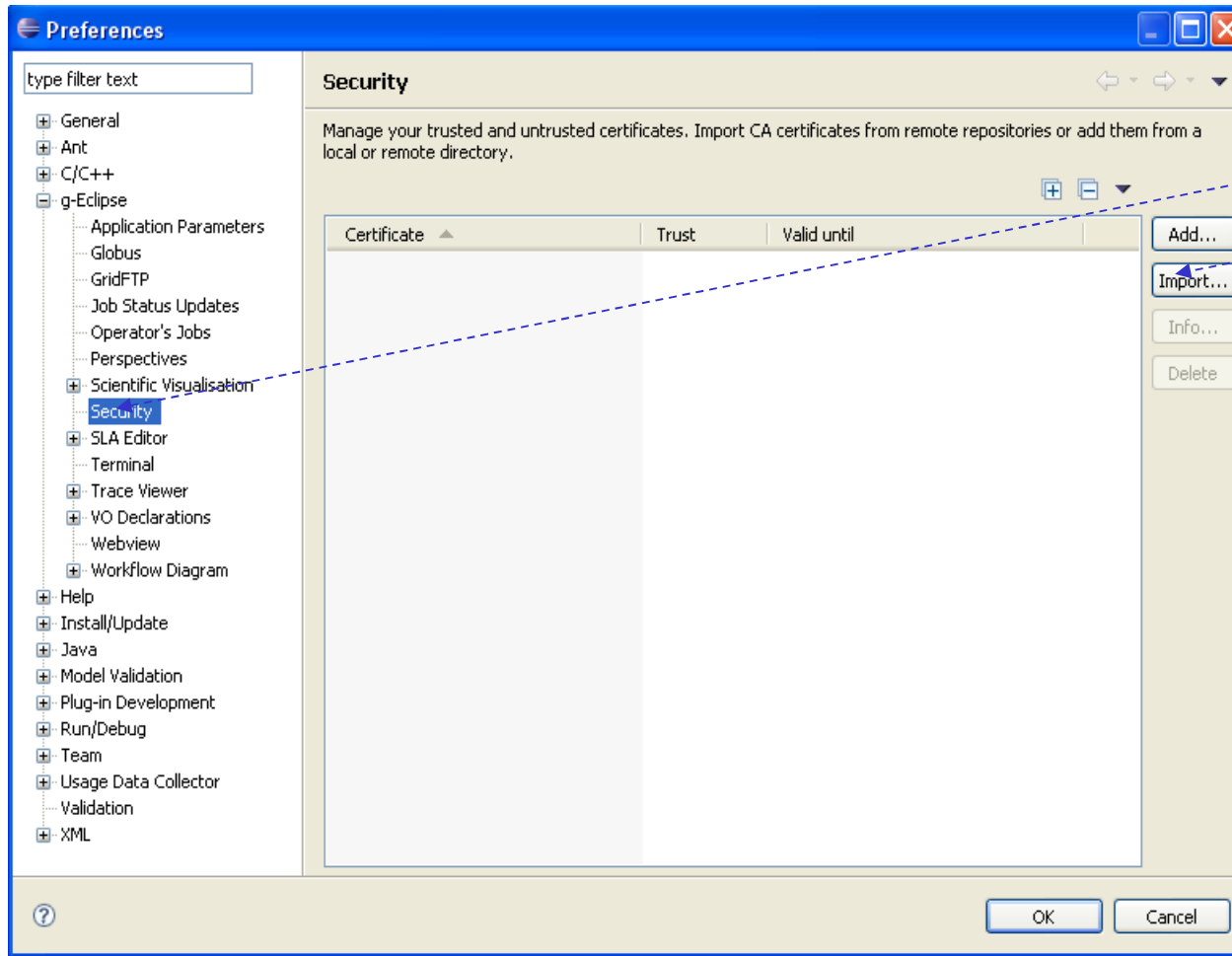


Make sure that in the URL the `vo=geclipsetutorial` and click Next

VO Settings (5)

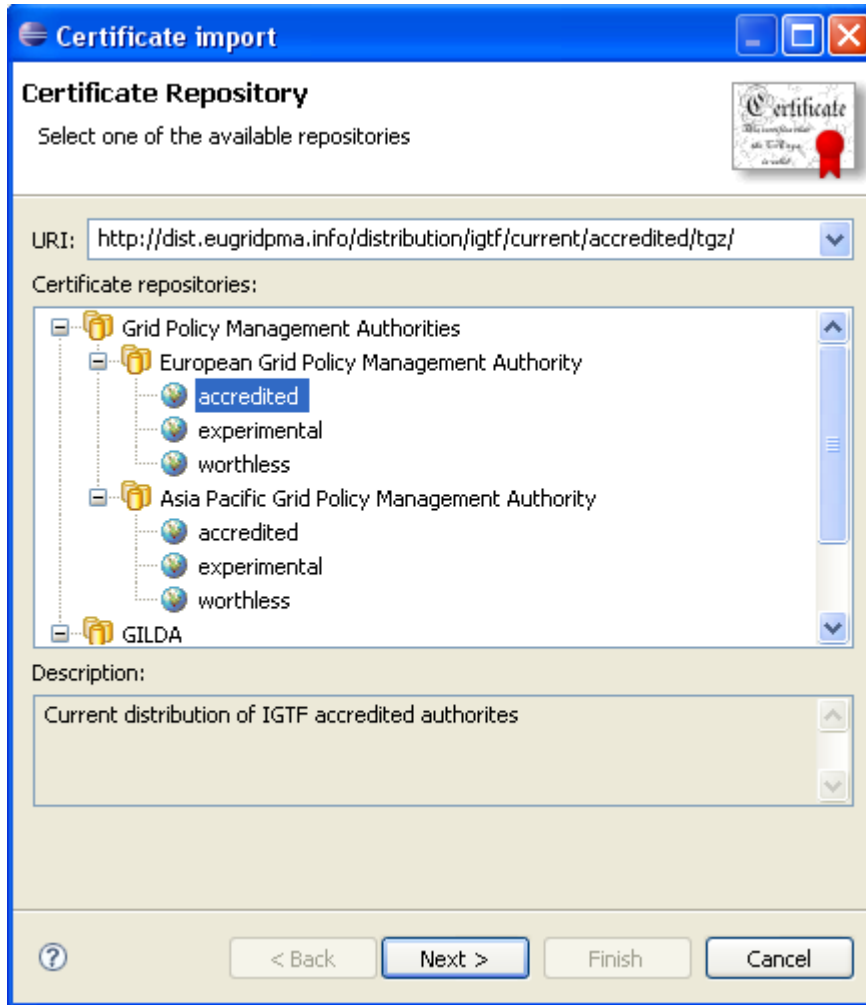


- Select geclipsetutor
- Click Finish

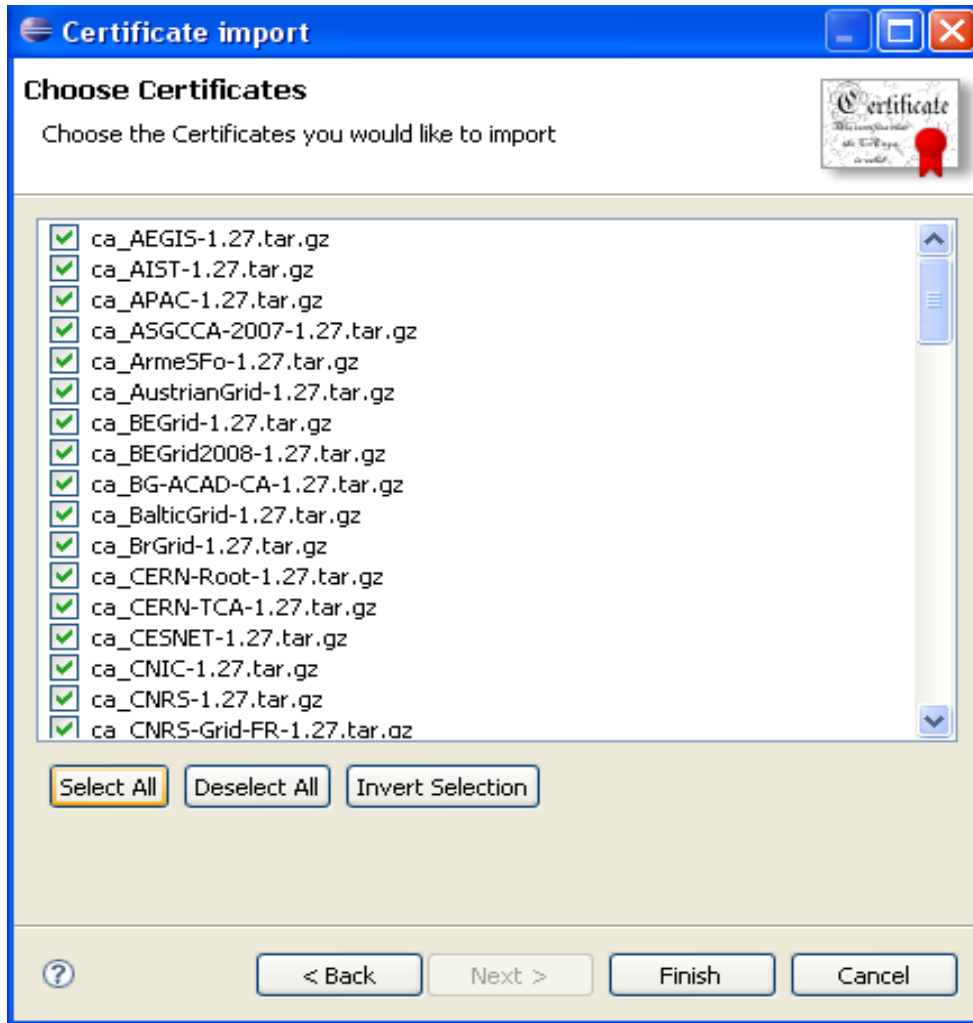


- Choose Security
- Click import

Security (2)

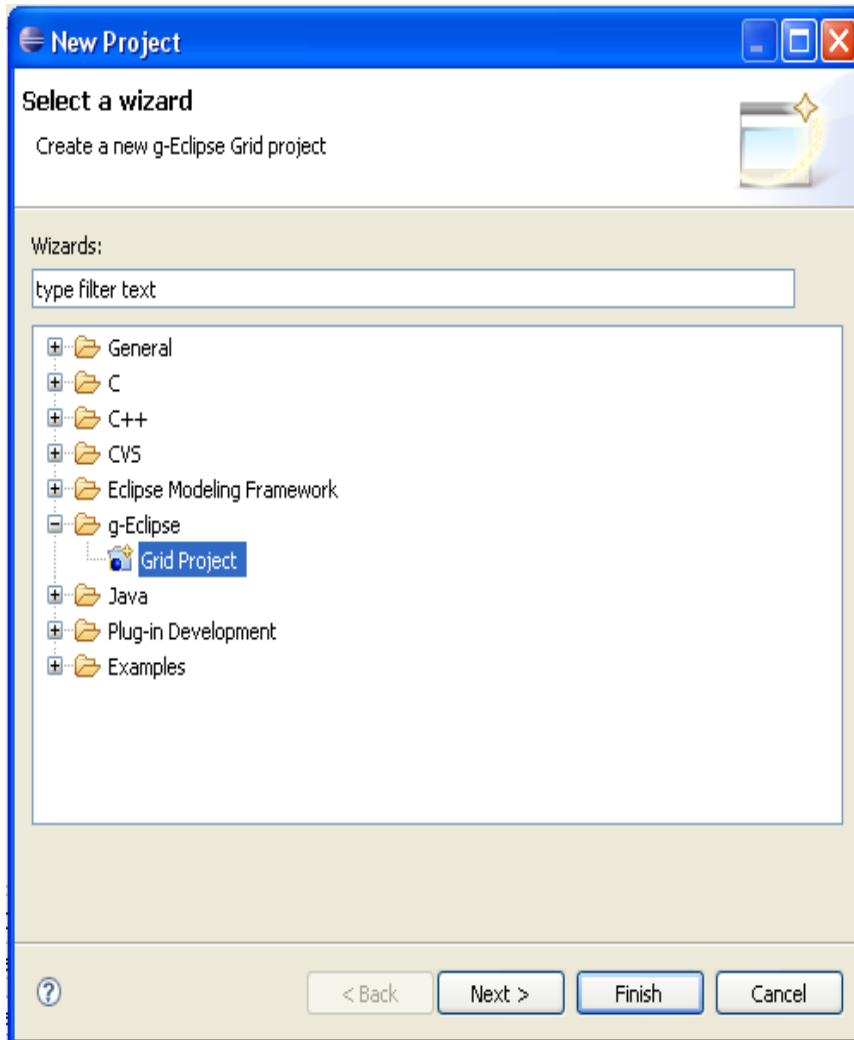


- Choose Certificate repositories accredited under European Grid Policy Management Authorities
- Click next to proceed



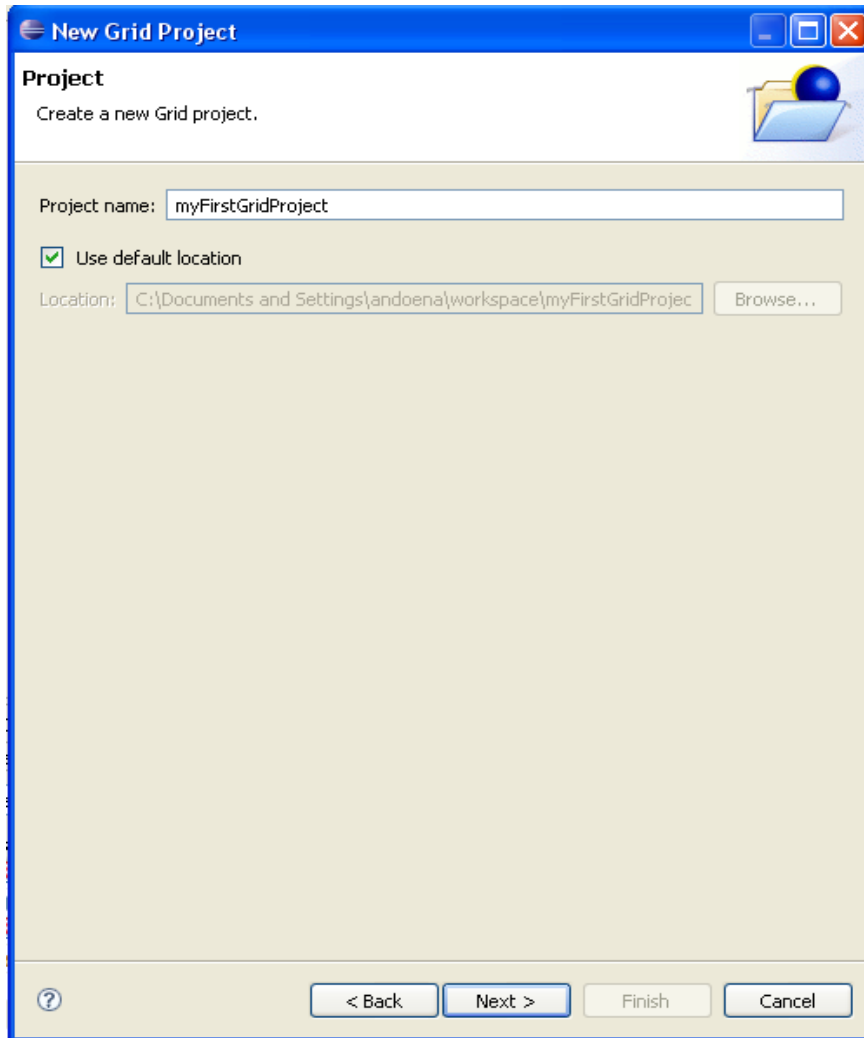
- Select All Certificates and click Finish
- Add GILDA Certification Authorities too

Creating a Grid Project



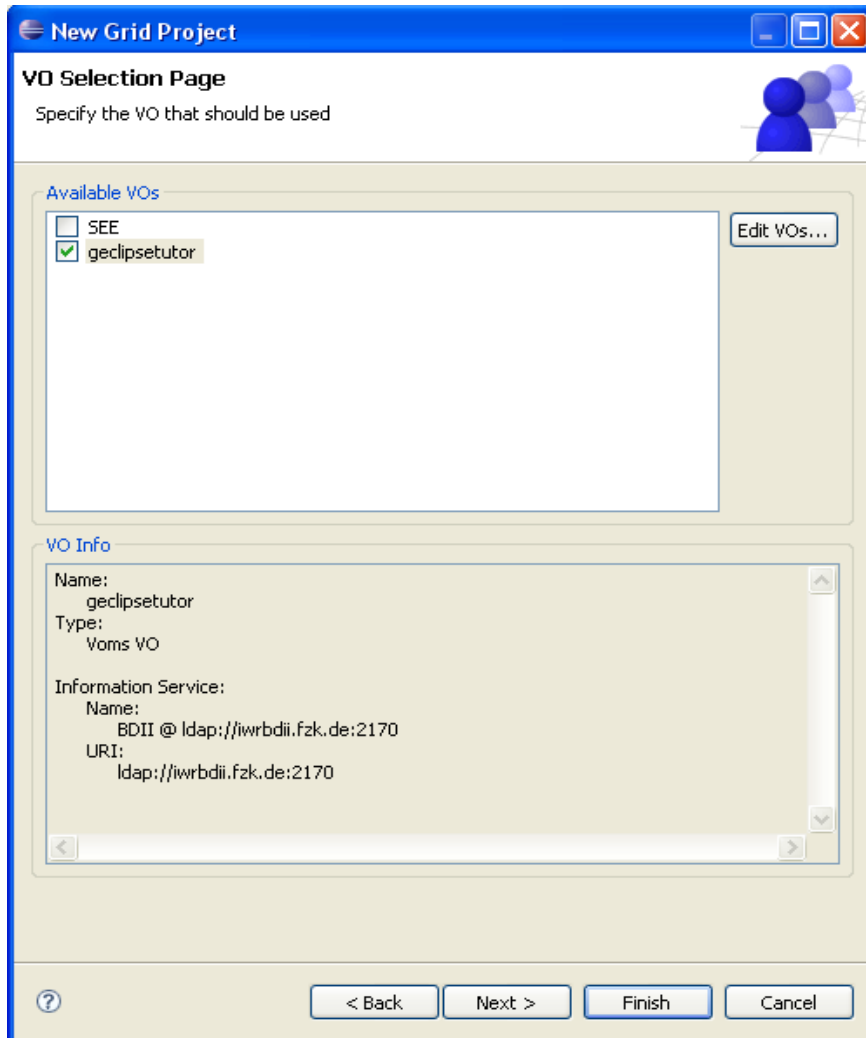
- A Grid Project can be seen as an entity that manages different aspects for Grid users (i.e. computing resources, storage resources, services, applications, Virtual Organizations, etc.)
- File --> New --> Project and choose the Grid project under g-Eclipse
- Click Next to proceed

Creating a Grid Project (2)



- Choose a Project name
- Click Next to proceed

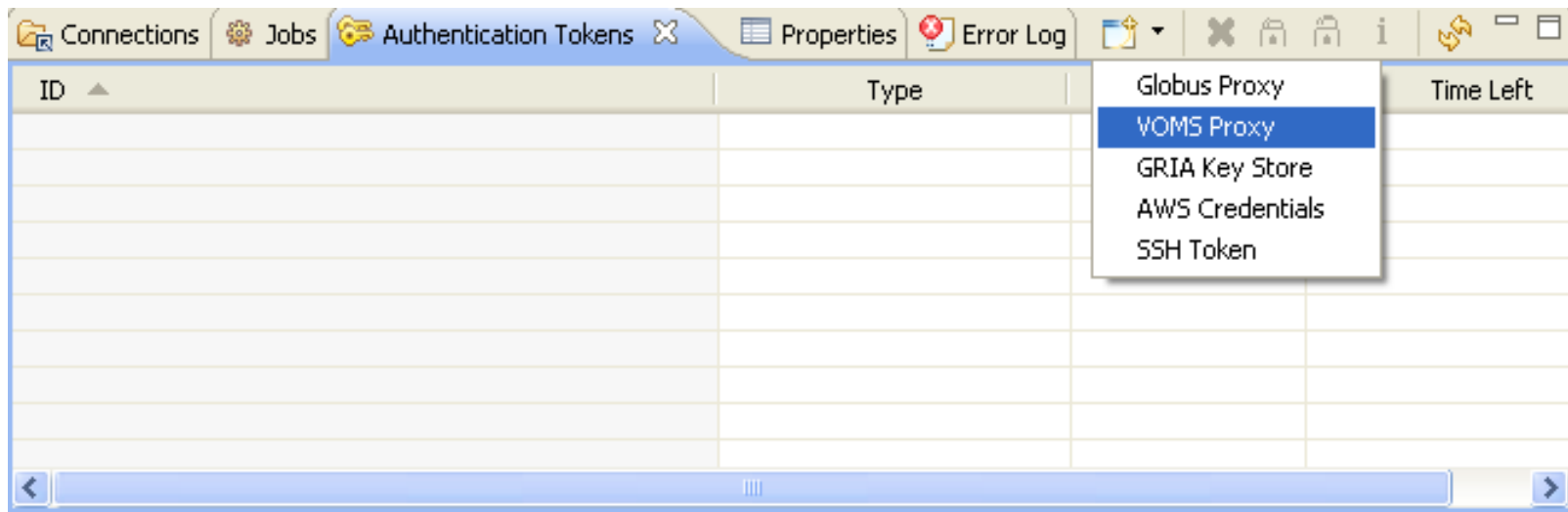
Creating a Grid Project (3)



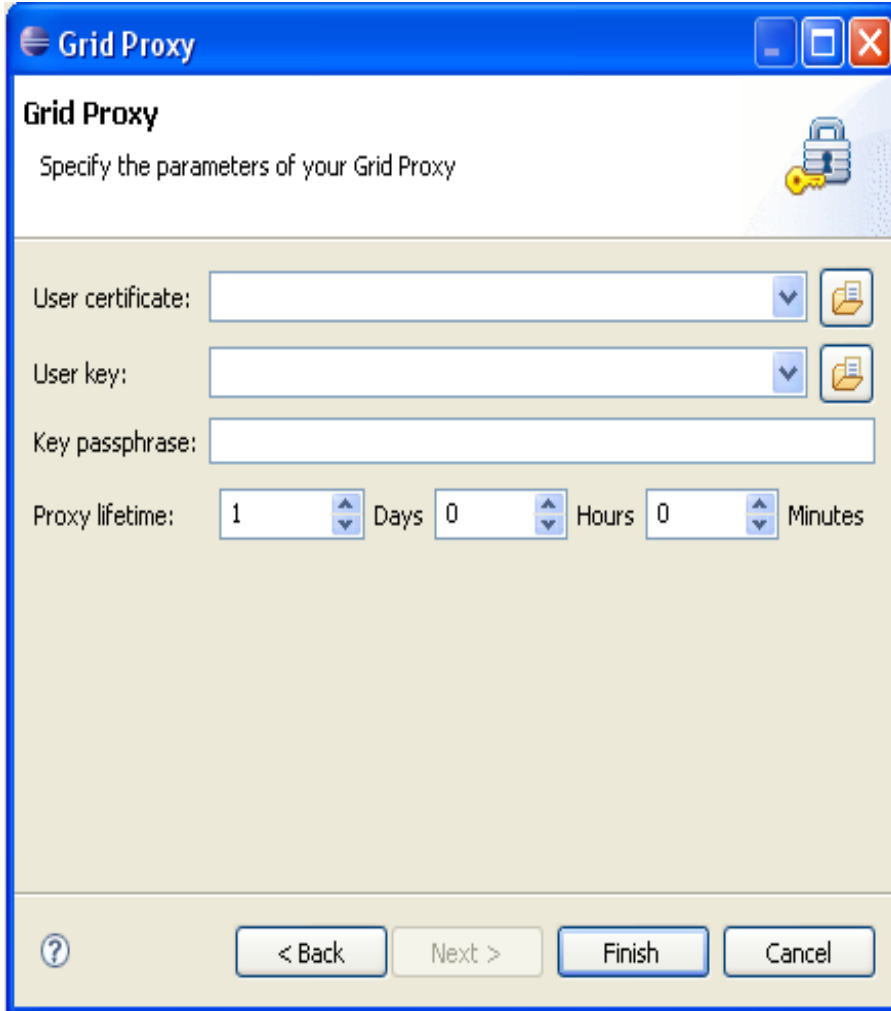
- Choose geclipsetutor
- Click Finish

Grid Authentication

- Access to remote Grid resources requires a system for a user and role based Authentication and Authorization
- Grid AA system relies on security tokens, which are created by the user
- g-Eclipse offers a simple mechanism to deal with tokens for Authentication and Authorization



Grid Authentication



The screenshot shows a Windows-style dialog box titled "Grid Proxy". The window has a blue title bar with standard minimize, maximize, and close buttons. Below the title bar, the text "Grid Proxy" is displayed, followed by the instruction "Specify the parameters of your Grid Proxy" and a small icon of a padlock with a key. The main area contains four input fields: "User certificate:" and "User key:" are dropdown menus with file explorer icons to their right; "Key passphrase:" is a text input field; and "Proxy lifetime:" consists of three spinners for "Days" (set to 1), "Hours" (set to 0), and "Minutes" (set to 0). At the bottom, there is a help icon (question mark) and four buttons: "< Back", "Next >", "Finish", and "Cancel".

- Browse the user certificate
- Browse the user key
- Write the Key passphrase
- Click finish

Authentication Token Activate

- Right click on authentication
- Choose Activate

