

g-Eclipse - a framework for Grid users, Grid operators and Grid developers based on Eclipse

Thursday 10 May 2007 14:20 (25 minutes)

Describe the scientific/technical community and the scientific/technical activity using (planning to use) the EGEE infrastructure. A high-level description is needed (neither a detailed specialist report nor a list of references).

The g-Eclipse project aims to build an integrated workbench framework to access the power of existing Grid infrastructures. The framework will be built on top of the reliable eco-system of the Eclipse community to enable a sustainable development. The framework will provide tools to customize Grid users' applications, to manage Grid resources and to support the development cycle of new Grid applications.

In the first year of the project, support for the gLite middleware will be implemented

Report on the experience (or the proposed activity). It would be very important to mention key services which are essential for the success of your activity on the EGEE infrastructure.

The g-Eclipse project started its collaboration with the EGEE project in July 2006.

The project uses computing and storage resources of the EGEE infrastructure as well as different central services like Information Systems, Resource Brokers, Workload Management Systems. As the project focuses on the implementation of reusable user interfaces, it uses the existing services of the EGEE infrastructure.

The project is therefore strongly dependent on the existing Java API of all EGEE grid services. Currently, such APIs do not exist for all services which might influence the project's progress.

With a forward look to future evolution, discuss the issues you have encountered (or that you expect) in using the EGEE infrastructure. Wherever possible, point out the experience limitations (both in terms of existing services or missing functionality)

The g-Eclipse framework will build the integrated Grid environment (IGE) of the future for Grid end users, Grid resource operators and Grid developers by providing an open and extensible eco system based on the industry compliant Eclipse Platform.

Describe the added value of the Grid for the scientific/technical activity you (plan to) do on the Grid. This should include the scale of the activity and of the potential user community and the relevance for other scientific or business applications

As the g-Eclipse framework aims for middleware independence, the emerging eco system has the potential to be the reliable graphical user interface to access the power of grids in the future. The framework will be open to integrate existing and new tools.

The g-Eclipse project will address three major groups in the Grid domain: Grid users will benefit from the Desktop-like access to Grid resources; Grid operators and resource providers will be able to reduce the time-to-service by the Grid management and Grid site configuration tools; and Grid application developers will reduce the time-to-market for new Grid applications by accelerating the development and

deployment cycle.

The g-Eclipse project addressed sustainability from the very beginning. The g-Eclipse project is now accepted as an official technology project of the Eclipse Foundation (www.eclipse.org/geclipse).

Author: Dr KORNMEYER, Harald (FORSCHUNGSZENTRUM KARLSRUHE (FZK))

Presenter: Dr KORNMEYER, Harald (FORSCHUNGSZENTRUM KARLSRUHE (FZK))

Session Classification: Users in the wider Grid community - from science to business

Track Classification: Related Projects