Contribution ID: **6** Type: **oral presentation**

Interactive European Grid: an interoperable infrastructure targetting interactivity, visualization and parallelism

Friday 11 May 2007 11:00 (20 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 int.eu.grid project (http://www.interactive-grid.eu) aims to deploy and operate a production-level e-Infrastructure for demanding interactive applications with advanced visualization capabilities, and quality support for parallel jobs. The infrastructure is inter-operable with EGEE resources. We shall present in this forum the progress of the project in its first year to address the necessities of users interested in these features

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.

Concerning interactivity, our modified Broker is able to start inmediately short jobs requiring a quick answer on the screen, and in combination with the Migrating Desktop, provides true application steering of the simulation. For this purpose the middleware developpers have enhanced the Migrating Desktop from the Crossgrid project to support glogin and advanced visualization tools like GVid.

From the point of view of parallel jobs the project has developped a self-consistent schema to support OpenMPI jobs through our clusters, and works towards the inter-cluster MPI support using PACX-MPI. The results in this respects will be presented together with the EGEE MPI working group in another presentation of this Forum.

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)

Our project is complementary to the EGEE project because it complements the batch oriented approximation of the EGEE grid, and at the same time maintaining compatibility with the EGEE infrastructure. There are many applications in different fields which relay on the possibility of having a fast answer from the simulation point of view. Such are for example medical image analysis, which are only foreseeble as a hospital true tool if waiting time does not exceed 30 minutes.

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

Deploying and operating an interoperable production-level e-Infrastructure for
demanding interactive applications will impact the daily work of researchers.
The main features of this scientific initiative are:

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* Distributed Parallel (MPI) Interactive Computing and Storage at the Tera level
* User Friendly Access through a Grid Interactive Desktop with powerful visualization
* Supporting Virtual Organizations at all levels: setup, collaborative
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environment, grid enhancement of applications, execution and monitoring tools,
discussion of results.

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Session Classification: Interactivity and Portals

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