Type: oral presentation

The EGRID Web Portal: an access point to the EGRID facility.

Friday 11 May 2007 14:00 (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).

EGRID is a project funded by the Italian Ministry of Education (MIUR) with the aim of building a pilot grid facility for the Italian research community of Economics and Finance.

Our web portal was developed to address some of their specific usability needs.

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 portal is based on the Gridsphere framework. In particular it uses the MTA SZTAKI P-Grade portlets for the workflow job submission and for downloading certificates from a MyProxy server. Data management and certificate upload were instead developed by EGRID to meet Economics and Finance research requirements.

The data management is based on ELFI, a Linux filesystem interface centred around logical names. The key feature of the infrastructure was the existence of an SE that is able to enforce the logical ACLs. EGRID co-developed the StoRM SRM server, the only SE that meets this requirement.

The portal's main features include:

- -data management through a GUI file browser;
- -GUI access to file permissions (rwx) and extended ACL;
- -the personal certificate and private key never leave the user's computer;
- -simplified input and output data files for job submission, since only logical file names are needed.

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 information system contains data that are not always accurate: because the update rate is too low, and also because information may be misleading. For ex. the status of a submitted job is not updated in real time.

There are misconfigured sites that act as "Black Holes" where all jobs end-up and get aborted. It would be useful if the RB isolated these sites.

Our portal is affected because it displays outdated information, and because it occasionally gives an anomalously hight rate of failures

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

The portal is designed to give our users a straightforward access to the grid. Its easy to use interface allows to focus on the problem without spending too much time on learning the tool itself. The graphical interface is closer to the way users work and it makes available all grid tools through a Java enabled web browser. The EGRID portal data management is centred around the Logical Filename Catalogue (LFC) and it hides the physical replica mechanism. More over, it allows the graphical set up of ACLs on files in grid storage in the EGEE infrastructure, for members of the same VO.

This portal can be used by all other communities with similar data management needs.

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Session Classification: Interactivity and Portals

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