## The Simple API for Grid Applications (SAGA)

Wednesday 9 May 2007 19:30 (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).

Grid applications need programmatic access to compute and data resources. Grid middleware like gLite (or Globus) provide custom API's to their services. These interfaces are driven by the provided middleware and services, rather than application 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.

We will demonstrate a number of small, SAGA-based utilities for data and replica management and for job submission and control for GT4-based middleware grids.

(Bindings to gLite are currently under development and will likely not be ready for demonstration at the time of the meeting.)

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)

No issues as of now.

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 Simple API for Grid Applications (SAGA) defines such a programmatic interface.

SAGA is being standardized within the Open Grid Forum (OGF). SAGA is focused on and has been derived from application use cases. SAGA emphasizes the simplicity of the API, and a consistent presentation of its functionality areas, namely job submission, file and replica management, data access and streaming, application monitoring, and remote procedure calls.

SAGA implementations present the API while binding to a variety of Grid middleware systems. This enables portability of applications across different grids, middlewares, and their versions.

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