Proceedings on collaboration between EGEE and Platform Computing - User impact and experience

Friday 11 May 2007 09:00 (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).

At EGEE'06 conference, Platform Computing was announced as one of the first EGEE Business Associates (EBA). This talk will report on the achievements of this collaboration and partnership and on further proceedings. We will discuss, how extended exploitation of readily available scheduler options started to change and improve usage and user experience. One key result is improved handling of different workload types in the EGEE infrastructure.

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.

Exploitation of advanced LSF features: The exploitation of LSF is based on the recently introduced gLite mechanism for forwarding arbitrary information from the grid user to the batch system. This allows users to request the functionalities of the batch system to greater detail. The gLite team in Bologna together with Platform Computing currently explores how this feature can be used to better exploit the capabilities of LSF in order to build complex algorithms, in particular for parallel jobs (MPI) and service-level agreement (SLA) scheduling and enforcement. Target is to define a generic way of using grid-user provided information for interfacing to local batch systems. The exploitation of LSF's data scheduling features will also be explored. The potential impact on users and resource providers is tremendous. Again, we will show first results and details, further plans. Questions from the audience are encouraged, discussion expected

With a forward look to future evolution, discuss the issues you have encountered (or that you expect) in using the EGEE infrastructure. Wherever possi-

ble, point out the experience limitations (both in terms of existing services or missing functionality)

Future collaboration items: Some potential topics have been identified and will be presented. Contributions and ideas on collaborations are welcome.

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

Impact and potential: As several Platform Computing customers participate in EGEE, already more than 30% of the compute capacity is provided by Platform LSF sites. Making the already available advanced LSF features working for gLite users and EGEE resource providers is impacting the effective throughput and responsiveness situation significantly, considered it potentially be used on more than a third of EGEE infrastructure. First results and details are presented. LSF integration: In the past, LSF integration into gLite and prior EGEE software stacks has proven to be improvable: Robustness and performance, ease of use, well sorted documentation, support for extended features are targeted. A side effect of the LSF exploitation is a freshly reviewed and debugged LSF integration, updated documentation and certification by the EGEE labs. Examples will be shown.

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Track Classification: Workflow