

AWare - An easy Way to Access GRID REsources

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).

AWare is a European Grid technology project aimed at the development of a opensource,userfriendly solution,to create,store and manage complex job workflows.There are many communities and related Grid projects within EGEE(eg ALICE,LHCb,BioMed,INFN,etc)already using the glite middleware and many more potential users from diverse industrial & business community(eg manufacturing,automotive,financial services,etc)that could benefit from a framework able to manage complex job flows and their lifecycle

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.

An evident synergy point is that both the A-WARE framework and the Grid portal of Gilda community (GENIUS) are both developed and running on the EnginFrame system, with common goals: to improve user friendliness, to focus on innovative and flexible workflow management systems and hides the complexity of the Grid from users. Genius is a powerful Grid Portal that allows scientists to exploit Grid resources and allows to expose GLite-enabled applications via Web-browser as well as Web Services. To facilitate the exploitation, particular care will be put on simplifying the deployment of Grid Applications under typical research scenarios, such as security, single-sign-on systems, ACL management, etc. Finally the project will aim to adopt as well as influence common used standards in all key project areas. A-WARE will primarily target the Grid Foundations topic of the above-mentioned strategic objective.

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)

To date, the EGEE community does not have an established solution to use and fully support complex and generic workflows. A-WARE is able to integrate different workflow engines (such as MOTEUR, etc.) for different standards (like BPEL, SCUFL, etc.). With all these features A-Ware satisfies most of requirements and needs of different user communities that aim at a powerful workflow management.

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

A-WARE (An easy Way to Access GRID REsources) will develop a stable, supported, commercially exploitable and high quality technology, framework to manage workflows, from design to storage, including submission, monitoring, flexible retrieval, data management and incarnation on virtualized grid resources. All these functions will be performed in a very simple, interoperable and application independent way. The guiding principle of the project as stated in the AWARE technical annex, will be to exploit and leverage the maturity of the grid middleware in particular gLite middleware support as one of the project outcomes. Another guiding principle of the project is the development of a technology help diffuse and widen the adoption of Grid technology via a web thinclient approach, based on userfriendly interfaces, that hides the complexity of the underlying Grid middleware to occasional as well as frequent users. Finally industrial exploitation and sustainability are key aspects of the project

Author: Dr VENUTI, Nicola (NICE srl)

Co-authors: Dr CURTONI, Andrea (NICE srl); Dr TORTEROLO, Livia (NICE srl); Dr MELATO, Maurizio (NICE srl)

Presenter: Dr VENUTI, Nicola (NICE srl)

Session Classification: Poster and Demo Session