## EGEE'08 Istanbul



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## A-Ware, an easy way to access grid resources

Tuesday 23 September 2008 16:49 (1 minute)

Describe the activity, tool or service using or enhancing the EGEE infrastructure or results. A high-level description is needed here (Neither a detailed specialist report nor a list of references is required).

AWare is a European Grid technology project aimed at the development of an opensource, userfriendly, solution to create, store and manage complex job workflows.

There are many communities and related Grid projects within EGEE (eg 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 impact of the activity, tool or service. This should include a description of how grid technology enabled or enhanced the result, or how you have enabled or enhanced the infrastructure for other users.

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 GLiteenabled 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.

Abstracts for online demonstrations must provide a summary of the demo content. Places for demos are limited and this summary will be used as part of the selection procedure. Please include the visual impact of the demo and highlight any specific requirements (e.g. network connection). In general, a successful demo is expected to have some supporting material (poster) and be capable of running on a single screen or projector.

The A-WARE, is a demonstration will show how its possible to create and manage the complete the life-cycle of a grid workflow through a web application and standard web browser.

The demo consists of four principle phase.

The first; the design phase is where the workflow is graphically designed using an applet.

The second; the service binding phase, connects the A-WARE services to the workflow designed in phase one.

The next phase consists of data mapping, where the input and output data are mapped to the A-WARE services. The final deployment phase, generates the actual workflow which is then memorized in the system. After the four phases are complete the workflow can then be submitted to the Grid. To run the demonstration a standard screen (or projector ) and internet connection is needed.

Describe the added value of the grid for your activity, or the value your tool or service adds for other grid users. This should include the scale of the activity and of the potential user community, and the relevance for other scientific or business applications.

AWARE (An easy Way to Access GRIDREsources) 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.

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**Session Classification:** Demos and Posters

Track Classification: Poster