

Towards a WBEM-based Implementation of the OGF GLUE Information Model

Wednesday 13 February 2008 16:00 (20 minutes)

The current gLite middleware relies on the GLUE 1.3 information model and its implementation in LDAP in order to advertise the available resources and their characteristics in the EGEE infrastructure. In the context of the Open Grid Forum, the GLUE Working Group is defining the evolution of this information model to improve the current design and to unify a number of existing approaches in a community standard. The OMII-Europe project is engaged in this activity and is developing a modular framework for managing the information providers based on WBEM (Web-Based Enterprise Management) technologies. A client supporting multiple renderings is being developed in order to be useful for different consumers (e.g. LDAP for BDII, XML for Web Services, SQL for R-GMA).

3. Impact

WBEM technologies are a suite of standards for the management of resources well-established in the enterprise area and with mature implementations both as commercial and open source products. These technologies well suite the need for handling information providers and for exposing them via a standard management interface.

When adopted in the proper way, they can simplify the addition of information providers from various developers responsible for the software component to be advertised. Moreover, it can reduce the amount of bad data via a stronger control at the metering side.

4. Conclusions / Future plans

A WBEM-based framework for managing information providers of Grid resources is an important test for improving the quality of the produced data and for symplifing the development and deployment of the providers. The support for multiple renderings easies the exposure of such information via different types of services using different concrete data models.

Provide a set of generic keywords that define your contribution (e.g. Data Management, Workflows, High Energy Physics)

information modeling, information discovery, information modeling, information discovery

1. Short overview

In the context of the Open Grid Forum, the GLUE Working Group is defining the next generation information model for the description of Grid resources targeted at enabling resource awareness, discoverability and selection. The OMII-Europe project is engaged in this activity and is developing a modular framework for managing the information providers based on WBEM (Web-Based Enterprise Management). In this presentation, we will describe the details and the advantages of this approach.

If demonstration is requested please explain what visual or interactive aspects of the contribution necessitate a demonstration rather than a presentation or poster?

A potential demonstration could focus on two main aspects: 1. how the framework works from both the server side and the client side; 2. a tutorial on writing information providers for GLUE based on this framework

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