

AMGA WI: the AMGA Web Interface to Remotely Access Metadata

Wednesday, 9 May 2007 17:30 (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).

The AMGA Web Interface Project is carried out by INFN Catania and IR&T Engineering s.r.l.(a SME located in Catania, <http://www.irt-engineering.com>). INFN leads research activities to port several Industrial Use Cases over the Grid and the IR&T aims to design a Digital Archive for Cultural Heritage that adopts Grid as a Content Management System. Since metadata is at the base of cataloguing activity we considered AMGA as support for archiving functionalities in our feasibility study.

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.

AMGA WI allows users to access to the AMGA Server from any platform and from anywhere (via internet HTTPS connection). The user just needs a web browser, an internet connection and a valid VOMS proxy to be authenticated to the AMGA Server. After a successful login he will be able to interact with the AMGA Server and use the same functionalities of AMGA as he/she would have been using the command line client. The user is able to browse the hierarchy of AMGA collections, to inspect their schema and permissions and to list their entries. He/she also can create a new collection, to define a metadata schema for it and modify this one adding/deleting attributes. Finally, he/she can add/edit/delete entries. The application provides the user with a tool to define and execute queries in order to find entries that match against specified conditions. All previous operations are performed according to the role that the user has in the VO he/she belongs to (this is done using the VOMS features).

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)

AMGA WI is built on top of the AMGA API. We did not have encounter many issues in using the gLite middleware during the development of the AMGA WI application. We had just some troubles (they revealed already known bugs) with the API but their developers gave us fast support. The only issue that deserves to be underlined regards the impossibility to design a "Connection Pool" for the AMGA Server since each AMGA session is tightly dependent on the security credentials of the current logged user

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

Usually, the users use a suite of command line tools installed into specified machines called User Interfaces. Typically, this approach is for expert users only and it brings several limits: user account on a UI, troubles with net access and firewalls, VPN client installation on the user machine. Moreover, commands must be typed exactly requiring a pretty good knowledge of syntax and a steep learning curve is necessary to get new users started. AMGA WI is designed for the end user to provide a visual mode to work on the AMGA Server. The web interface is very user friendly and there are not dependencies from the UIs. The interaction is immediate by means of simple and schematic service presentation pages. A simple internet connection is enough to use the service and wizards represents a fast and simple way to train and teach users quickly. However, the most important point is that no syntax knowledge is required and users do not lose the high level conception of their activities.

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