Contribution ID: **57**   Type: **Training session**

EMI Trainings : EMIR, ARGUS, EMI-ES

Thursday, 11 April 2013 11:00 (1h 30m)

Impact

This session is mainly oriented to advanced user and system administrators, providing them a deep understanding and concrete hands-on for some of the most promising EMI new products, allowing an guided evaluation of their characteristics before their adoption. Both users' and point of views will be stressed, granting a complete overview of the product presented, that will be completed with some tips on deployment scenarios.

Summary

The European Middleware Initiative (EMI) is a close collaboration of the
three major middleware providers, ARC, gLite and UNICORE, and other
specialized software providers like dCache. Beside harmonising the middleware products, EMI is putting a strong accent on interoperability promoting, via adoption of standards, development of interfaces common to three middleware. On this regards, this session will provide training introducing some of the key developments brought by the EMI third release, MonteBianco, like the EMI Registry, ARGUS and the EMI Execution Service. The session is aimed to experts within the NGI, either system administrators or advanced users eager to know in advance more details about these new, production ready, features.

URL

http://www.eu-emi.eu

Description

This training sessions aims to provide a deep understanding of usage of new or recently developed EMI products, not yet fully deployed in large scale production infrastructures as EGI.
Each of the middleware constituting EMI, has developed throughout the years his own 'Computing Element', i.e. a grid service providing access to the computing resources localized in a site, generally managed with a Local Resource Management System, most known of which are LSF, Condor, PBS-Torque, GE. The agreement among gLite, UNICORE and ARC, has brought the definition of common, standard based specification language and interfaces, constituting the EMI Execution Service (EMI-ES), that provides a gateway to the different Computing Element flavours, allowing the transparent execution of jobs regardless of the different middleware backends.
ARGUS is the solution developed by EMI to address the need for a common, standardized authorization service. The service is based on the XACML standard, and uses authorization policies to determine if a user is allowed or denied to perform a certain action on a particular resource. Authorization policies are managed via the Policy Administration Point (PAP), and distributed to the Policy Decision Point (PDP) for evaluation, which are then used by the Policy Enforcement Point (PEP) to issue authorization decision for the controlled services.
EMI's EMIR provides a federated, distributed, hierarchical service registry, enabling, via its REST-ful interfaces, discovery of services within a Distributed Computing Infrastructure. EMIR has been designed keeping in mind the decentralised nature of NGI, furthermore based on heterogeneous Grid middleware. In this way, single point of failure or bottlenecks are eliminated, still allowing controlled indexing of service, offering for instance the freedom of choice of which service have to be seen from the higher levels of the hierarchy.

Primary author: GIORGIO, Emidio (INFN)

Co-authors: ZANGRANDO, Lisa (INFN); Mr TSCHOPP, Valery (SWITCH); SHIRAZ MEMON, ahmed (JUELICH)

Presenters: GIORGIO, Emidio (INFN); ZANGRANDO, Lisa (INFN); Mr TSCHOPP, Valery (SWITCH); SHIRAZ MEMON, ahmed (JUELICH)

Session Classification: Training

Track Classification: Community Platforms (Track Lead: P Solagna and M Drescher)