Contribution ID: **137**   Type: **Oral Presentation**

EMI Data, the unified European Data Management Middleware

Monday, 11 April 2011 14:00 (30 minutes)

Impact

EMI-Data is aiming for a universal data management system suitable for the use in large and highly versatile infrastructures. It combines the great experience of teams, working on well established products which have already been in production for many years. Under the financial and organizational umbrella of EMI, those teams now have the change to build a complete system, covering the needs of infrastructures like EGI and PACE and to attract new customers for the EMI distribution.

Overview

At the time of the Vilnuis meeting, one third of the funded period of EMI will have been elapsed. Although EMI is build upon an rather complex structure, our customer infrastructures can expect that all the administrative gears are finally interlocked, that realistic plans exist for future software development, maintenance and deployment and that significant work has been done to achieve the goals planned for the first 12 months. This presentation will focus on the work done within the data management part of EMI (aka EMI-Data). This includes, but is not limited to, the improvement of existing components, the integration of middlewares, known as harmonization and the work on cross platform projects to enable interoperability and to provide standard interfaces to make EMI data components compatible with corresponding industry products.

Description of the work

Besides improving individual components, EMI-Data has identified about a dozen cross middleware activities aiming to guarantee interoperability and to make EMI data components compatible to common standards. This includes work on the SRM specification as well as on its security mechanism. In terms of data access standards NFS 4.1 and WebDav will be offered by EMI storage elements. In addition to the work on interoperability of components and middlewares, flaws in the design of the currently deployed systems will be fixed as there is the problem of the inconsistency between the name spaces of file catalogues and storage elements. Pre-EMI activities like the migrating from GLUE 1.3 to 2.0 as well as the integration of the ARGUS authorization framework will be finalized within EMI data. Other pressing topics, like the specification and application of a common accounting record for data and a common monitoring framework will be tackled. Whenever possible, EMI-Data will use existing standards or will feedback specifications to standardization bodies, like the Open Grid Forum. EMI-Data takes great care that modifications in specifications will be communicated and agreed on by GRID frameworks outside of EMI, e.g the US Open Science Grid.

URL

Conclusions

This presentation will report on the work of EMI Data and on activities planed for the rest of the project. It will focus on the implication of EMI-Data work for EGI and its user communities. Details will be give on those activities which won't be presented at the Vilnuis meeting in a separate presentation.

Primary author: FUHRMANN, Patrick (DESY)

Co-authors: NILSEN, Jon Kerr (University of Olso); Dr KEEBLE, Oliver (CERN); Dr MUELLER-PFEFFERKORN, Ralph (TU-Dresden); Dr ZAPPI, Riccardo (CNAF/INFN)

Presenter: FUHRMANN, Patrick (DESY)

Session Classification: EMI: Software for Distributed Computing Infrastructures

Track Classification: Data Management - Technology