

Contribution ID: 8 Type: Poster

## Data access and storage: some new directions

Tuesday, 23 September 2008 16:53 (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).

The topic is related to an overview of some recent directions and new developments about high performance data access and storage of huge data sets.

Sometimes, a unique repository is not enough, and the scientific community strives to get a more uniform view of a performant data store distributed between different sites which can be put at work with existing data-movement protocols, but which definitely is able to seamlessly give such a unique view.

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.

A lot of development was done and is still in progress about the technologies about WAN-wide repository globalizations, data access through WAN, and virtual Mass Storage Systems. However, prototypes deployed in non trivial installations are available since some time. A non trivial production deployment of some of these is also foreseen by some HEP and Astrophysics experiments, where, most of the time, the grid is a key factor of the overall computing infrastructure.

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.

The very basics of these newer paradigms for distributed data access are already in use by several scientific communities, mainly dealing with High Energy Physics and Astrophysics, but not only those. We can see similar approaches to high performance distributed storage also in some high level companies, which have to face problems very similar to the ones HEP had to face in the last decade. The ultimate goal of such innovative data distribution paradigms is to give an efficient and robust way for the grid computing elements to analyze the data they need in a more performant way, thus leading to lower latencies from the users' perspective.

Primary author: Dr FURANO, Fabrizio (Conseil Europeen Recherche Nucl. (CERN))

Presenter: Dr FURANO, Fabrizio (Conseil Europeen Recherche Nucl. (CERN))

Session Classification: Demos and Posters

Track Classification: Poster