Contribution ID: **291** Type: **not specified**

Data Management and Caching

Thursday, 22 September 2011 14:35 (20 minutes)

The Large Hadron Collider, the world's largest scientific machine, is in operation since the beginning of 2010 and currently relies on the WorldWide LHC Computing Grid and EGI infrastructures for the offline computing needs of the 4 main experiments that will take data at this facility. Each experiment manages multi-Petabyte data volumes across tens of computing centers throughout the world that are analyzed by a community of few thousand physicists. Since the resources are limited, it is a crucial task to optimize the available storage and network resources. At the same time, given the complexity of the experiments' data management systems and the daily amount of files that are created, replicated and deleted, operational tasks need to be as automized as possible in order to keep the manual interventions on a minimum. Different activities comprised in the TSA3.3 have successfully focused on these matters and the achievements have impacted on the evolution of the High Energy Physics computing models. This presentation will cover the key achievements of this work-package and also talk about the future trends that are being adopted in the experiments. The talk will propose solutions that can be of InSPIRE-ation for other virtual organizations that are using the grid to store their data.

Primary author: BARREIRO MEGINO, Fernando (CERN / EGI-InSPIRE TSA3.3)

Presenter: BARREIRO MEGINO, Fernando (CERN / EGI-InSPIRE TSA3.3)

Session Classification: Key Results from the Services for Heavy User Communities (SA3) Workpackage