

## **dCache ready for LHC production and analysis.**

*Thursday, March 26, 2009 3:00 PM (20 minutes)*

At the time of CHEP'09, the LHC Computing Grid approach and implementation is rapidly approaching the moment it finally has to prove its feasibility. The same is true for dCache, the grid middle-ware storage component, meant to store and manage the largest share of LHC data outside of the LHC Tier 0.

This presentation will report on the impact of recently deployed dCache sub-components, enabling this Storage Element for final LHC production data taking, reconstruction and analysis. We will elaborate on performance improvements caused by redesigned dCache subsystems like the new dCache name space provider (Chimera), a revised SRM front-end and others. Furthermore we will touch on new functionality in dCache, requested by the LHC experiments to simplify large scale Grid Data Management. Most prominent in this area certainly is the introduction of Access Control Lists (ACLs) for the Chimera name space, the protection of SRM spaces as well as shielding the robotic tape system from malicious or accidental misuse by non production VO members. We will present first ideas on the implementation of a generalized group and user quota system in dCache, seamlessly interacting with the SRM space management sub-component. Finally we would like to discuss dCache solutions for the next big challenge in the LHC computing world, the data analysis. In this context we will present a comparison between legacy local data access protocols and modern industry standards e.g. NFS4.1.

### **Presentation type (oral | poster)**

oral

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