



Contribution ID: 24

Type: **Parallel**

Analysing I/O bottlenecks in LHC data analysis on grid storage resources

Tuesday 22 May 2012 13:30 (25 minutes)

We describe recent I/O testing frameworks that we have developed and applied within the UK GridPP Collaboration, the ATLAS experiment and the DPM team, for a variety of distinct purposes. These include benchmarking vendor supplied storage products, discovering scaling limits of SRM solutions, tuning of storage systems for experiment data analysis, evaluating file access protocols, and exploring IO read patterns of experiment software and their underlying event data models. With multiple grid sites now dealing with petabytes of data, such studies are becoming increasingly essential. We describe how the tests build, and improve, on previous work and contrast how the use-cases differ. We also detail the results obtained and the implications for storage hardware, middleware and experiment software.

Author: BHIMJI, Wahid (University of Edinburgh (GB))

Co-authors: VUKOTIC, Ilija (Universite de Paris-Sud 11 (FR)); HELLMICH, Martin Philipp (University of Edinburgh); DOIDGE, Matthew (Lancaster University); CLARK, Philip (University of Edinburgh (GB))

Presenter: BHIMJI, Wahid (University of Edinburgh (GB))

Session Classification: Computer Facilities, Production Grids and Networking

Track Classification: Computer Facilities, Production Grids and Networking (track 4)