Contribution ID: **317**   Type: **oral presentation**

Experience with distributed analysis in LHCb

Wednesday, 15 February 2006 14:40 (20 minutes)

Physics analysis of large amounts of data by many users requires the usage of Grid
resources. It is however important that users can see a single environment for
developing and testing algorithms locally and for running on large data samples on
the Grid. The Ganga job wizard, developed by LHCb and ATLAS, provides physicists such
an integrated environment for job preparation, bookkeeping and archiving, job
splitting and merging and allows job submission to a large variety of back-ends.
Ganga can be used from a python Command Line Interface, from python scripts or from a
GUI. The LHCb baseline back-end for accessing Grid resources is the DIRAC Workload
Management System. The DIRAC Workload Management system implements many advanced
methods to minimize the response time for the user analysis jobs as well as to
maximize the success rate of user tasks. It provides an easy way for clients to
securely submit and monitor their jobs and to retreive the results. We present here
the experience of using Ganga for submitting analysis jobs to the Grid through the
DIRAC WMS, directly to LCG, and to a local batch system. Performances of the various
back-ends are compared.

Primary author: Dr EGEDE, Ulrik (IMPERIAL COLLEGE LONDON)

Co-authors: Dr SOROKO, Alexander (University of Oxford);   Dr TSAREGORODTSEV, Andrei (Centre de Physique des Particules de Marseille, Universite d'Aix - Marseille II);   Dr MAIER, Andrew (CERN);   Dr MOSCICKI, Jakub (CERN);   Dr HARRISON, Karl (Cambridge University);   Mr PATERSON, Stuart (University of Glasgow);   Dr GARONNE, Vincent (Laboratoire de l"Accelerateur Lineaire, Universite de Paris-Sud (ParisXI))

Presenter: Dr EGEDE, Ulrik (IMPERIAL COLLEGE LONDON)

Session Classification: Distributed Data Analysis

Track Classification: Distributed Data Analysis