



Contribution ID: 311

Type: poster

RGLite, an interface between ROOT and gLite

Wednesday, September 5, 2007 8:00 AM (20 minutes)

After all LHC experiments managed to run globally distributed Monte Carlo productions on the Grid, now the development of tools for equally spread data analysis stands in the foreground. To grant Physicists access to this world suited interfaces must be provided. As a starting point serves the analysis framework ROOT/PROOF, which enjoys a wide distribution within the HEP community. Using abstract ROOT classes (TGrid, ...) interfaces can be implemented via which Grid access directly from ROOT can be accomplished. A concrete implementation exists already for the ALICE Grid environment AliEn via which also the distribution of PROOF daemons in the Grid can be taken care of. Within the D-Grid project now also an interface to the common Grid middleware of all LHC experiments, gLite, has been created. Herewith it is possible to query Grid File Catalogues directly from inside ROOT for the location of the data to be analysed, Grid jobs can be submitted into a gLite based Grid, the status of the jobs can be asked for, and the results can be obtained. It is shown that it is possible by using RGLite as well to send PROOF daemons as Grid jobs, to start a PROOF session by connecting to the submitted PROOF daemons, and to perform a data analysis using PROOF and gLite. The possibility to create a PROOF analysis cluster shared by several computing centres using existing middleware versions of gLite and/or Globus is being investigated.

Submitted on behalf of Collaboration (ex, BaBar, ATLAS)

D-Grid HEPCG

Summary

a ROOT-gLite interface, RGLite, has been implemented via which it is possible to do most interactions with a gLite based Grid directly from within ROOT scripts.

Primary authors: Dr MANAFOV, Anar (GSI); Dr SCHWARZ, Kilian (GSI); Dr MALZACHER, Peter (GSI)

Presenter: Dr SCHWARZ, Kilian (GSI)

Session Classification: Poster 2

Track Classification: Distributed data analysis and information management