

CDF way to Grid

Monday 23 March 2009 15:40 (20 minutes)

The CDF II experiment has been taking data at FNAL since 2001. The CDF computing architecture has evolved from initially using dedicated computing farms to using decentralized Grid-based resources on the EGEE grid, Open Science Grid and FNAL Campus grid.

In order to deliver high quality physics results in a timely manner to a running experiment, CDF has had to adapt to Grid with minimum impact on the physicists analyzing the data. The use of portals to access the computing resources have allowed CDF to migrate Grid computing without changing how the users work. The infrastructure modifications was done by small steps over several years.

CDF started from the usage of glidein concept; i.e. submitting Condor-based pilot jobs to the Grid with the first pilot-based pool in 2005 at the CNAF Tier 1 site in Italy,

followed shortly by similar pools in N.America, Europe and Asia. This pilot job model evolved in OSG into the PANDA submission model of Atlas and the glideinWMS of CMS and recently integrated also into the CDF infrastructure. In order to access LCG/EGEE resources using the gLite middleware the CDF middleware has been reimplemented into

LcgCAF, a dedicated portal.

The evolution of the architecture together with the performances reached by the two portal will be discussed.

Presentation type (oral | poster)

oral

Authors: Dr LUCCHESI, Donatella (University and INFN Padova); Dr SNIDER, Rick (Fermilab)

Presenter: Dr LUCCHESI, Donatella (University and INFN Padova)

Session Classification: Grid Middleware and Networking Technologies

Track Classification: Grid Middleware and Networking Technologies