Grid Enabled Collaboratory for Scientific Research

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Basic Idea of GECSR

- Collect and integrate user interface and collaborative technology into a LHC science gateway
- Joint between Atlas and CMS IT
- Fund *outside* of CMS/Atlas streams
- Proposal in 2004 - not funded

GESCR Proposal

- Suggestion from the NSF Physics directorate to create a CMS/Atlas joint IT effort
- Planned: Four years - Medium ITR (NSF)
- Partners: Caltech, Fermilab, Florida International University, Lawrence Berkeley, Maryland, University of Michigan, University of Texas Austin, University of Iowa

HENP: Unique Aspects

- Already highly collaborative as a scientific field
- Globally distributed in space and time (both time-zones and years)
- Technology savvy but wary :)
- Solutions for data and compute underway without significant user interface component

GESCR in a sentence..

….. will combine the best open-source applications from within the HENP communities (and from allied Grid and National Middleware efforts) within a common portal interface.

Put another way: There is a lot of work going on in HENP that does not really have much of a user interface yet. We want to put a user interface on the Grid and other activities.

GESCR in a sentence..

….. will combine the best open-source applications from within the HENP communities (and from allied Grid and National Middleware efforts) within a common portal interface.

What I tell people:
GESCR will be a tri-corder for the Atlas and CMS collaborations. Starting with inter-human communication and moving towards data processing and analysis.

Elements of GESCR

- Sakai with Grid Support (from OGCE / NEESGrid)
- Sakai Collaboration Tools
- Well funded analysis of application, requirements, and challenges throughout the project
- Additional new capabilities
  - VRVS Integration (rooms, record, playback)
  - Web Lecture Archive (WLAP)
  - VNC support

GESCR Elements (cont)

- MonaLisa integration
- Collaborative LaTeX editing environment
- Peer-to-Peer file sharing
- Language of Access to handle "over-collaboration"
- Adaption of HEPBook
- GESCR support office (Y3)
- Education and outreach activities

Summary

- Model was good
- Collaborative portals is a well-funded and well-coordinated activity (SAKAI, JISC, DEST, …) collaborative software is improving in general
- Perhaps CI will break the logjam at NSF and fund better cross-disciplinary activities which result in user interfaces for eScience and in particular Atlas/CMS
- This workshop is a good start to reenergize the thinking around the GECSR