

Update on CMS Remote Operations Software

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LHC@FNAL Task Force Meeting

Introduction

- Erik asked me to present what I have learned so far regarding what software we need to develop for the CMS part of LHC@FNAL.
- The goal is to come up with a labor estimate for developing the software for CMS remote operations at LHC@FNAL.
- Input so far:
 - Weekly meetings (CMS ROC, EvF & DQM)
 - Informal meetings
 - Tracker Monitoring Workshop (15-Nov-2005)
<http://agenda.cern.ch/fullAgenda.php?ida=a057210>
 - A small amount of application testing
- This talk:
 - My impressions, brief updates on application testing, and discussion of the next steps

Impressions

- The CMS HCAL group has been successful with remote operations for quite some time.
 - Shuichi described this in his talk at the Tracker Monitoring Workshop.
<http://agenda.cern.ch/askArchive.php?base=agenda&categ=a057210&id=a057210s0t12/moreinfo>
 - One improvement that I heard would be to restrict “control” to authorized users.
- It seems that there is a fair bit of work needed to get the CMS DAQ ready for the cosmic challenge (including remote monitoring), but there doesn't seem to be anything specific to LHC@FNAL. That is, the pieces that are needed are independent of where the remote monitoring will be done.
 - I have heard of some specific needs (e.g. the Storage Manager), but I haven't seen a full list of tasks to prepare for the cosmic challenge.

Application testing – KBook

- KBook is an electronic logbook that is still under development
- The CMS DAQ group is evaluating logbooks to choose one for the cosmic challenge - KBook is a candidate
- The web-based user interface could use improvement (my opinion, but I believe that this is recognized by the development team)
- I have only tried the web interface – getting access for evaluation is pretty informal at this point

Application testing – CMS DQM

- DQM is Data Quality Monitoring. The system provides histograms that are filled in the high level trigger farm that can be viewed remotely.
- I have succeeded in running applications on the CMS user analysis farm that simulate the production, distribution, and display of histograms. I haven't succeeded in running the web-based monitor yet, and I am still trying to learn how one would monitor data taking at CERN.
- Instructions for these steps seem to be slightly out of date since the system is still changing

Next Steps?

- KBook – anything further?
 - CMS DQM – I'll continue learning how to run remote monitors.
Other approaches?
 - PVSS – suggestions?
 - Grid monitoring?
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- Are there concrete deliverables or milestones that I should keep in mind (leading up to the WBS)?