

WLCG Database Technical Evolution Group Relevance to OSG

OSG All Hands Meeting
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DB TEG topics

- Conditions (CORAL, COOL, Frontier, Squid)
- DB operations (Oracle)
- Non-conditions Online DBs (PVSS)
- Distributed apps (NoSQL)

Plans related to Frontier service

- Used to distribute conditions database worldwide for ATLAS & CMS with a RESTful http protocol
- CMS planning to add second server site
 - Probably at FNAL
- ATLAS has 6 server sites, reevaluate in 2013
- CMS planning on adding failover proxy Squids at CERN and at new server site
 - Prevents site Squid proxy failures from affecting sites that are working normally

Plans related to Squid

- Site Squid proxy caches are currently closely monitored by CMS Frontier team
 - TEG recommends moving this monitoring to WLCG
- Also recommend that each site use one set of Squids for all production, approved applications (known behavior, Frontier & CVMFS for now)
 - Sites that allow opportunistic use of their job slots by other applications should have a separate set of Squids for those applications
- Recommend WLCG standard for jobs to discover Squids when they arrive on a site

NoSQL Databases

- Everybody thinks the name is misleading
- CMS and especially ATLAS have done much good work evaluating them
 - ATLAS using Cassandra in production
 - CMS using CouchDB and MongoDB in production
 - Both have some production use of Hadoop's HDFS
- Hadoop's MapReduce identified as potentially most disruptive if used to analyze event data
 - Proposal to have CERN-IT set up a cluster

For more info

- <https://twiki.cern.ch/twiki/bin/view/LCG/WLCGTEGDatabase>