

**** [2006.09.28 Meeting](#)**

Lessons learned from fun with DIM_ADD_ONS

Fix was warranted because all experiments had the problem in some form when using >1 parameter.

At D0, problem was small; at CDF half of params had same ##; at MINOS like CDF with incorrect rows in DIMS_ADD_ONS (no param_types nor param_catagories). All of these problems are now fixed; except not migrated to MINOS production.

Cost based optimization book states that Oracle cost based optimizer keeps history of query performance and that goes into optimization. Table reanalysis clears query performance history. Can we turn this off?

Lessons learned:

- 1) Don't use production right away
- 2) Improve documentation about how to check things in dev/int and how to look at log files. And how to change DB servers. There is no MINOS client base config in `sam_config`.
- 3) TNS names needs to be up to date in order to do testing of all experiments on one machine. [Perhaps solution - development linux box - Randolph wants ksh (AT&T Korn Shell)]

Randolph will send writeup for #2.

V7 command to add parameter does not assign unique ##'s (and assigns 1). BAD! Randolph will fix. Robert will put in IT ticket (2257).

This problem can be eliminated by assigning ## on the fly - put in new dimension server.

2) CD Reorg

Not much to say here.

3) OSG

100 M new events every month.

What about calibration DB servers?

600 MB per 1 GB - at least that's copied from the local head node

Next step - migrate forwarding node to v7. Not much development - just installation. Parag only has to talk to himself, so work should be easy. What about migrating the LCG forwarding node (probably driven by MC use).

Coding and development is done. Next is operations (bitter?) experience.

Support from SAM: Review calculations. Heavy load expected for DB servers; may need help for this from rest of SAM team.

Refixing experience tells us that DB servers and calibration servers should be ok. May have to bring back extra routing station we had for refixing to handle the in/out traffic. Probably driven by the size of the offsite caches. No estimates yet on # of caches and size and sites.

Initial time scale is to start by end of October. Waiting certification of meta-data (Daniel).

Parag is upgrading vdt to the latest version -- affects D0, CDF and core SAM because of `sam_gridftp`. We store CA certificates in `sam_gsi_config`. Instead, store these certs in vdt (vdt does this, so we should just use it). VDT maintains the CA certificates (if vdt fails to update an expired CA cert, then we'll have problems -- along with others in the grid world). This requires changes at D0, CDF (talk to Krzysztof about CDF issues).

4) Updates

Andrew (with flu) setup test SRM3 environment (has more disk space -- deliver 2-3k files per project -- order of mag step up from SRM2 tests). End of project MIS event issue was fixed (old - project simply disappears; have a running projects table that refreshes with every pull - with a DB join can determine completed projects). Steve is setting up for these larger tests. Creating datasets to run through files at random.

Looking at memory consumption with MIS - turned off some of the MIS push events, made memory size ok. So this is a station that "works". Try it out on clued0 and then turn on push features as needed and watch (and fix) memory problems.

Andrew is trying to gauge performance of SRM over multiple station releases (e.g. does a new release make the performance faster or slower)? E.g. put the performance data into a database.

SAM upload - Dehong prepared the metadata generator and test area using the CDF metadata grabber for testing. Idea is to deploy at remote sites to generate metadata.

5) MISC

Daylight savings time is "manually" calculated in DB code for DFC, calibration and online. May need to be checked and altered for new dates.

From the 9/21 meeting about consumed files query - the old incorrect behavior is wrong and should be fixed with the current parameters. Old queries that change as a result will be "broken" (actually, they'll be fixed), but then again they were broken to begin with.