

## *SAM (REX/Ops) Operations Meeting 2008.03.11*

Present: Adam (typist), Randolph, Angela, Art, Eric, Jerry, Krzysztof, David, Robert, Andrew, Anil

Minutes are at <http://cd-docdb.fnal.gov/cgi-bin/ShowDocument?docid=2618>

For reports submitted to the meeting...

*The report text is in this font*

*Comments made during the meeting are in this font inline with the report*

### **Releases:**

*Adam is not aware of any new releases.*

### **DØ:**

*Events worth mentioning:*

*--- d0ofprd1 seemed down very early morning at 22:41 (Mar. 9) and restarted at 00:52 (Mar. 10).*

*See Anil's notes.*

*--- grid db servers needed to be restarted more than once ( the 1st was after last Tuesday's maintenance )*

*v5 crashed when DB went down.*

*--- d0ora2 (==d0ofprd1) was back online after Oracle and OS maintenance (Tuesday Mar. 4) as S. Kovich reported at 09:49:52 (Mar. 4).*

*Unresolved issues at the time of writing:*

*#3429:*

*/sam/remote/durable1ld0srv065\_fnal\_gov\Locationsld0srv065\_fnal\_gov status:down ??*

*Joel says that production has stopped, but the disk is not full (yet) ??*

*#3428: Possible location of missing files? : Robert seems to have found the files ??*

*Files are written to the staging area but never written to tape. Probably due to DB outage. Robert is running a script to write these files to tape.*

*#3432: unlocated thumbnail file --- Adam found that it's due to the fact that one can't undeclare that file because that file is a parent of other files. We're waiting for the*

user's reply.

*Still waiting on Fu's decision to retire or overwrite with new name.*

#3421: "can't get job status" --- waiting for Andrew's instruction ??

*XMLDB is returning an empty dictionary for this particular job - that is wrong. Andrew is looking at it.*

#3416 - fcps were crashing because they were getting 1020 requests - exceeded max file descriptors.

*Robert changed the code to reject new connections instead of crash. We also added new fcp queues to handle the larger load. Robert made it so you can use more than 1024 file descriptors.*

#3422 - Bug report into Condor about periodic expressions. Burt Holtzman has some hints.

## **CDF:**

DF SAM Shift Report 03/04/08 - 03/10/08

Relatively quiet week despite farm reconstruction & ntupling activity.

Events/Status:

9940B19.mover in error (Load failure with volume IAA885)

AMB and myself repaired the farm station plot by restarting the log server on cdfsamweb.

03/06 stk sl8500 (specifically for CDF: LTO3 library manager) was paused around noon for about ~15min due to a problem with the ACSLS software on fntt-gcc.

gaps in the dcache monitoring plots mainly earlier in the week, possibly correlated with rcp and upd/fnkits problems reported by others.

IA1853 still in "noaccess" state (awaiting vendor response)

dcache fcdpdata320 still offline awaiting a reinstall

## **MINOS:**

General -

Kreymer on furlough next week. See you in 2 weeks.

AFS - Timeouts much reduced, 1 per week ( was per day )

Enstore -

CD ops minutes 2/25 - retire AML robot this year

LTO-3 crisis last week, still have 5000 file backlog

15 drives total

10 dedicated to CMS

3 Run-II database backups for long periods

3 broken

-1 for all other activity ( for Minos, all but raw data )

DCache -

Waited for many files to be restored from tape, since Friday 29 Feb.

Helpdesk tickets 111951 (kreymer) and 112020 (rubin) - resolved  
some files waiting for LTO-3

some files stuck in pool-to-pool copies - fixed by dcache-admin

SAM -

Need to upgrade station to v6\_0\_5\_23\_srm - next month

Oracle -

## OPEN ISSUES

IT 1146: cannot test existence of sam tape location

IT 2071: quadratic project startup time growth

PLAN -

Migration to 9940B tape can proceed anytime

## DB:

D0 :

- d0ofprd1 was down between 10:36PM 03/09/08 and 12:53AM @ 03/09/08

Uploaded the db logs to Oracle. Cause hitting 2 bugs.

Solution Per tar 6758186.994 upgrade to patchset 10.2.0.4 as soon as it's available  
(end of mar. 08) and

in the meanwhile disable bloom filters as a temporary workaround.

set following init.ora parameter (SPFILE/PFILE) as a workaround:

`_bloom_filter_enabled=false`

This parameter has been set in all dev/int and prd. We plan to upgrade the database to 10.2.0.4 as it will be available.

*The other DBs (CDF, MINOS) will not be touched right now. Will update the other DB's at their regular next patch time.*

#### Announcement:

- April 1 - Upgrade the controller firmware on the 3par SAN storage. No interruption is expected.

However, this is for the first time, Storage Admin @Fermi is upgrading the 3par firmware.

- DONE

- Schema cut on d0ofprd1 during March 4th downtime - Start 7:00AM Downtime for 4 hours.

- To add composite index on lower(file\_name) and retired\_date

- Drop the unique index on lower(file\_name)

- Recreate as non-unique on file\_name.

- drop the unique constraint on file\_name and retired\_date

- Apply the patch 5926486

- Applying the OS patches.

#### Alert(s):

Message=Tablespace [OPERATIONAL\_IDX\_01] is [80 percent] full

Action: Added 7GB

- Increased the maxextents to 6000 for SAMPRD PF1\_FI\_FK\_I

Owner	Object	Type	Extents Used	Extents Allocated	Extents Left
SAMPRD	AP_PK	INDEX	196	200	4

- Action : Increased the max extents to 400

- Message=Tablespace [TS\_CF\_03312000] is [80.11 percent] full

Action: Added 1GB

Owner	Object	Type	Extents Used	Extents Allocated	Extents Left
SAMPRD	PF1_FI_FK_I	INDEX	2998	3000	2

Action: Increased the max extents to 6000

**CDF :**

- 03/18 schedule the DB security patch on cdfopr2 and SAM schema v6\_10

**Alert(s):****MINOS:****Enstore/dCache:**

enstore/dcache report  
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**Scheduled Downtimes:**

- o D0 - Tue, Mar 11, 8 am - noon
  - install s/w patch on the ADIC AML/2
  - replacement for Robot 1 arm arrived, requires inspection for damage
- o CDF - Tue, Mar 18, all day
  - upgrade of entire suite of enstore servers to SDE rack
  - update ACSLS code on fntt2
  - update license on fntt2 to include slots in SL8500-3

**Operations:**

- o d0en
  - continued problems with Robot 1 arm
  - all movers have been updated to SLF4.4
- o stken
  - 2 LTO3 movers received new MBs & memory
  - 1 LTO3 drive replaced (twice)
  - On Thu, ACSLS hung at GCC. We rebooted the host.
  - CMS is putting an unprecedented load on the CD-LTO3 library manager, which is exposing problems/bugs. Developers are working on solutions.
  - Minos began writing to LTO4 (one file family only)
- o fndca
  - several minos files did not become available to read. Several stuck

pool-to-pool copies were cancelled, freeing up some of the transfers.  
The rest were probably victims of the large queue in the CD-LTO3 LM.

o cdfen

- cdfensrv1:/cdfen exported to fncdfrv17, fncdfrv18

o cdfdca

- changes to gridftp doors to limit write access have broken  
the pageDcache cron job that runs hourly.