SAM (REX/Ops) Operations Meeting 2008.07.22

Adam (typist), Eric, Art, Angela, Randolph, Robert, Parag, Anil, SteveW, SteveS, John Yoh, Mike Albrow
Meeting time: 28 minutes

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

Downtime Notice:

(from yesterday's CD Ops Meeting)

- There is downtime for Stken Enstore on THURSDAY July 24th. This to upgrade to SDE. The following will be down:

Stken Enstore 7:30 - 18:00
SDE upgrade.
Stken Dcache 7:30 - 16:00
De-clutter racks.
CDF LTO3 Library 7:30 - 12:00
Down because of firmware update being done to SL8500.
D0 LTO4 Library 7:30 - 12:00
Down because of firmware update being done to SL8500.

Releases:

No new releases. New DB server coming (steve has to fix the uncached files [Make a JIRA ticket]).

DØ:

--- No shifter in the past weekend
--- A week characterized by complaints about the samgrid & samgfwd nodes

See minutes from the "Recent SAMGrid Problems" meeting to follow this one.

Recent Unresolved tickets:

DZSAM-148/158: "Forwarding nodes clogged up again"/"Production stalled for forwarding nodes samgfwd01/02"
--- a problem for more than a week

DZSAM-157: "condor_schedd on samgrid.fnal.gov" --- a new/different

problem or related to DZSAM-148/158 ?

DZSAM-156: Andrew/Gabriele/Parag suggested condor_config changes for Joel's held jobs --- Is this done ?
This looks to be related to DZSAM-141 (which complained about too many MC jobs being held).

DZSAM-152: "transfer failures from samgrid.indiana.edu" --- it was suggested to move more jobs to ouhep00
--- but was it done or to be done ? What's the plan ?
fcp paused at Indiana since they hit the 1024 limit. Should weight more jobs to ouhep -- done!

DZSAM-54 : "Jobs don't work on Lancaster Forwarding Node DZSAM-54" -- old issue but is being worked on now.

Robert: A new SRM storage site was added at UCSD. Joel said that his efficiency went up for that site to 95% (was low).

JOEL's MC OSG report (in part)...
DZero MC OSG production rose 0.5M events to 4.7M events last week. This is 26% above the average weekly OSG production rate for the past year of 3.8M events.

Production characterization: Good

Factors affecting production:

VO specific:

The problem with MC OSG grid jobs being held became worse last week. During that period 225 MC OSG grid jobs were held. This causes unavoidable operational inefficiencies that do not show up in the weekly event totals, but do show up in the weekly job efficiency numbers. A change to the condor configuration on samgrid.fnal.gov is to be deployed on Monday to help improve the situation. The forwarding nodes samgfwd1 and samgfwd2 were "nuked" on Sunday to start fresh after data production could not keep the data production farm full because of the forwarding nodes being clogged with bad jobs (held MC?). I suspect fixing the MC held job problem would go a long way to alleviating the data production bottlenecks on the forwarding nodes. We'll see how the condor config change works out.

Jobs at condor1.oscer.ou.edu were trying to get files from a non-existent fcp queue. The fcp queue was removed from the OSG sam station configuration. Also suggestion was made to change proportion of jobs getting files from samgrid.indiana.edu and ouhep00.nhn.ou.edu to be 2:1 OU:IU instead of 1:1 because of better network connectivity at OU. I agreed this was a good thing, but do not know if it was implemented.
Perhaps so given the efficciency results below.

OSG specific:

Problem with transfer failures at UNL due to clock skew noticed and presumably fixed.

Local storage element at ATLAS MWT2-IU very beneficial. Weekly job efficiency > 97% now. Local storage element brought up at UCSD CMS T2.

local job efficiencies:

These are looking better to me. As I said IU > 97% is now like FNAL in efficiency. UCSD ~29% much better, perhaps partially due to new SE there. A general OSG SE came in with job efficiencies of 12-24% which is an improvement. I think these improvements are the result of the fcp queue changes mentioned above. Still there were poor results for some SE's which I can attribute to the problems of grid jobs being held. In the case of ouhep0.nhn.ou.edu I know the poor result is because of jobs being held. Signature in efficiencies of held job problem is eff_code high while eff_fini low.

Request for use of SE at UFL denied by administrator. Additional sites being sought. Purdue next?

CDF:

CDF SAM report for 7/15-21, John Yoh

Summary :
Aside from a LT03 robot problem (see (1a) below), the system perform quite well this week--there was one instance of very heavy load (at Tues July 15 around 11 AM, there were 4200+ files to be restored--the system weathered this massive "attack" quite well--don't know whether that has anything to do with the subsequent LT03 robot problem on Thursday, though).
The cause of the 4200 bump needs to be investigated (was it one person?). If this is seen again, let Angela know.

(0) Continuing issues

(0a) Unresolved to-be-ignored "semi-permanent problems"

Dcache cells fcdfdata320-1/2/3/4 inactive

(0b) long term residual problems left over from previous week

DCache Number of cells OFFLINE= 8--fcdfdata146/7
(since about 2 weeks--supposedly being tested by FEF)

(1) Downtime

(1a) LT03 robot on the LSM replaced --LT03 was inaccessible
during Thur, Jul 17 around 13:30 till 14:50---
(there were a few problems with LT03 mover previously)

Krzysztof: Roman and Ray reported a dynamic link failure for Kerberos on Fermigrid. Do dCache doesn't work on certain fermigrid nodes. Angela should look at this (Steve has sent some instantaneous information).

Angela has been trying to get the test jobs working on the integration system but has been having some trouble.

K: Complaint from Alexey that his files live on the dCache cache for too short of a period of time (days). dCache disk capacity may be too low - but recent throughput is impressive.

MINOS

General

Enstore -

DCache -

Preparing for DCache/Enstore/BlueArc/AFS outage all day Thu June 24
Does this downtime affect everyone? How long is the downtime (4 hours)?

SAM -

Oracle -

Taking Stock meeting - no major issues, reviewing maintenance costsc

Dev/Int quarterly patches were applied Monday July 21 - no issues

OPEN ISSUES

IT 1146: cannot test existence of sam tape location
IT 2071: quadratic project startup time growth

PLAN -

DB

- Database Security patch was released July 16, 2008. Planning to deploy on databases.

D0 :

- Scheduling the Database security patche on d0ofdev1 July 22, 2008

Alert(S):

Information for: d0ofprd1

Owner	Object	Type	Extents Used	Extents Allocated	Extents Left
SAMPRD	AP_APS_FK_I	INDEX	396	400	4

Action: Increased the max extents to 1000

- Message=Tablespace [OPERATIONAL_IDX_01] is [80 percent] full

Action: Added 6GB

CDF :
Alert(s):

MINOS:
- Database security patches deployed on Minosdev/Minosint databases on July 21.
Alert(s):