Agenda

- Operations Updates (this slide deck), Bryan
- Rucio Discussion, Brad
- GitLab/GitHub discussion, Brad
- Farm node purchase specifications, Amitoj
- New <u>SWIF workflow summary</u> <u>reporting</u> - comments

Thursday, July 7, 2022



Tape Related Topics

- Four additional tape drives have been installed and are in use, bringing us to a total of 24 LTO8s.
- This is maximum drive capacity until we add another frame (long lead item; no immediate plans)
- As a data protection precaution, we are now reading back *all* tapes once they are full. Prior to this, we were verifying only raw data
 - Extra caution while we await final humidity fix from Facilities (more in a moment)
 - positive verification of checksums on all files



Tape topics (part 2): XRootD based jmirror transfer code

- The halls are now using a new XRootD based Jasmine client jmirror code.
- This removes custom scoket code in favor of community-supported tools
- Starts up a demon upon invocation to handle call-backs
- Jmirror cron looks for new files and validates completed files
- Jmirror runs and exits; transfer code lingers as necessary
- Aim is to eliminate stalls by separating file transfer from validation
- More resilient: if a demon dies, a new one will be started



Data Center Construction update

- HACS portion of construction completed, punch list is being addressed.
- Construction will last until July October because of air handler parts shortages
- In progress
 - Rack installation
 - Grounding
 - Networking
- We have cabinet space, power and cooling for procurements that are in the pipeline.



/work file usage and snapshots

- Snapshots are kept in case of accidental file deletion
- When a file is removed, its space is not reclaimed until the last snapshot referencing it expires
- This can be confusing because it is not clear from a "df" command.
- Because snapshot information is only visible server-side, we will need to create a tool to show it, likely on the web pages for /work areas
- Snapshots can be deleted on request for big changes to free space
- Snapshots cab be turned off entirely
- Snapshot contents are visible like so:



OSG Operations

- An HTCondor bug caused slow job turnover for several weeks in May. This has now been resolved and usage is up significantly.
- Regular patching and updates for OSG 3.6 continue on maintenance days
- Finalizing additional OSG submitter nodes (scosg2201 gluex, scosg2202 clas12) to complement scosg20 and provide multiple entry points for VOs. Kurt coordinating.
- Once 2201, 2202 are done, scosg20 will be rebuilt as RHEL8
- Scosg20 will be target for Moller, EIC for now.
- Scosgdev16 remains for testing



Service Now Portal

- Scicomp KB
 - <u>https://jlab.servicenowservices.com/scicom/s</u>
- Jlab-wide KB (including scicomp)
 - https://jlab.servicenowservices.com/sp
- Public Knowledge Base articles do not require login, but service portal does for now.
- Portal development continues with work from MIS



Misc Items

Next Maintenance Day: July 19th

- No major changes this month for the farm aside from routine patching
- Routine patching of servers on Science DMZ and other internet-facing servers.
- CNI maintenance: 5-10pm, to be announced in the JLab weekly as usual

NFS <==> Lustre Gateways

 Scigw20{a,b} hanging issue resolved? (Lustre client updated, Thread count increased)

• Lustre19

- more stable after upgrade, recent disruptions have been failing (slow) disks that were replaced.
- Today's traffic (typical)



- New Web portal pages
 - https://scicomp2022.jlab.org/scicomp/swif/summary
 - Contact Ying Chen, <u>ychen@jlab.org</u>, for development information, change requests
- SWIF file transfer (copy-back to lustre from /scratch) has been improved to handle scratch areas with massive numbers of files
 - Eliminates unneeded xfer of small working files that was loading lustre



From Carroll Jones this morning:

There is probably an underground chilled water piping system leak north the the TED Building in piping supplying chilled water to CEBAF Center. We will be doing more investigation today and developing repair plans.

To make the repair, chilled water supplied to CEBAF Center will have to be isolated. I have contacted chiller rental companies to quote providing a chiller to be connected to the connections at CEBAF Center similar to what was done when the piping was increased from 6 inch to 10 inch piping. As repair plans solidify, I will provide additional more specific information.



- MFA (procurement in progress after awaiting funding)
- OSG+JLAB Meeting to be scheduled
- OASIS, CVMFS, XROOTD space (OSG OSDF, fixes in progress for certain cases)
- Design of Next Farm environment for a later discussion
 - Operating System Choice
 - Software tool support structure (modules, etc)

