

FNALU Meeting
December 19, 2007

Agenda

- Batch Status
- NAS
- Solaris Platform
- Applications
- Feedback
- Other

Batch Status

- LSF
 - License Support ends 9/15/2008
 - CD Technical person no longer available
- Hardware is outdated
- Future options ...
 - Run Condor locally?
 - Move to the Grid?
 - Eliminate batch?

NAS

- FNALU switching from local mounts to NAS ...

Local filesystems -> NAS

System	Filesystem	Size	Used	Avail	Use%	Mounted on
flxi04:	/dev/sdb1	211G	195G	5.6G	98%	/usr/e781
flxi05:	/dev/sda3	30G	33M	29G	1%	/usr/minerva
	/dev/sda4	30G	18G	12G	61%	/usr/coupp
flxi06:	/dev/sdb1	184G	4.8G	170G	3%	/usr/scratch/ADmsd
	/dev/sda3	60G	136M	57G	1%	/usr/mice
fsui03:	/dev/dsk/c3t19d0s5	19G	3G	16G	17%	/fsui03/mafia

- Many users & projects use /usr/nas/scratch, /usr/scratch, /usr/scratch/sect1 on multiple nodes

NAS

- All but small requests will require funding
- Storage Group presentation ...
- Experiments please provide feedback on resource needs

Solaris -> Linux transition

- Current Sun hardware is old, plan is to replace with linux nodes
 - What Solaris applications are needed?
 - What Solaris functions are still needed?
 - CGI script testing

Input from Liz Buckley-Geer

- The centrally supported web servers are currently running on Sun machines and all files are served from AFS.
- I understand there are currently no plans to move them to Linux
- Various experiments are running cgi programs on their servers, e.g. MINOS, DECcam and probably others.
- Some of these programs are compiled code (e.g. C, C++) which means they are platform-specific .

Input from Liz Buckley-Geer

- Some 3rd-party interfaces like the DBI code in perl for database access. Some of these items are provided by the support group but sometimes we may need to build a package that is not supported by CD but that we want to use.
- Developers of these programs need access to a Sun platform with access to AFS space so that they can build cgi programs and 3rd-party packages for use on the central web servers.

Licensed Applications

- These are Linux-based applications
 - Ansys
 - Needs “beefier” interactive node
 - Needs batch support of some type
 - Mafia
 - Others?

Feedback ...

Feedback on NAS disk and applications:

- F. Ostiguy / L. Bellantoni from PPD
 - Applications (licensed) needed: MAFIA (License available in January.)
 - The Sun F95 compiler is a good product. GNU

Feedback from Minerva

- Minerva status
 - Almost everyone has an FNALU account
 - Login areas are in AFS, accessed locally and remotely
 - Reference code is in AFS
 - FNALU used to compile and test
 - Modest batch needs so far
 - Complete details from Heidi Schellman available at

<http://minerva-docdb.fnal.gov/cgi-bin/ShowDocument?docid=2157>

Feedback from Minerva

- Minerva needs
 - Home areas for all of our users + DB access
 - CPU for a small number of users
 - Modest but growing batch needs
 - 30 possibly growing to 100 GB of AFS space for reference codes / datasets
 - project disk space for copies of data on tape
 - 200-500 GB in 2008 going to 1 TB in 2009-2010 – perhaps 10 TB in 2014.
 - tape library access – for a few TB of data.

Feedback from DES/SNAP

- Tom Diehl reports that DES, SNAP ...
 - needs Fortran, /usr/scratch/sect1/diehl
 - has occasionally heavy cpu usage running Mokhov's MARS program
 - needs a few extra Gbytes, plus project disk

Experiments/Users

AFS code/home areas

- Eric Wicklund & Richard St. Denis, CDF
- Average ~5% of one processor, with peaks at night.
 - /afs/fnal.gov/files/code/dbsmon ~2 GBytes
 - /afs/fnal.gov/files/expwww/dbsmon ~80 GBytes
 - /afs/fnal.gov/files/home/room1/dbsmon ~500 MBytes
- Licensed applications: Oracle client is used.
- Other applications: MySQL, java, JFreeChart, perl and shell scripting.
- Share files with DZero.

Experiments/Users

AFS code/home areas

- Holger Meyer, MIPP experiment, E907 and P960:
MIPP is not using FNALU batch but some of us use FNALU interactively.
- Albert Stebbins, Astrophysics:
Several users have AFS home areas.
- Harry Cheung, FOCUS/e831:

Miscellaneous

- Requests for other uses on FNALU?

Contact Information

- Desktop and Server Support Group (DSS)
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