

EXECUTIVE SUMMARY

- Young Minos issues:
 - Start using our share of 4 PB Dcache, and /pnfs/minos/scratch
 - Beta-testing jobsub+ for full scale Fermigrid access
 - Bluearc is full, need to archive older files mcimport/STAGE and remove reco_sntp
 - get sntp from Dcache with ifdh cp, will prestage these first
 - Still shifting files out of app to data
 - Trying direct access to common files (templates, flux, LEM) in app area
- Need to move to SLF6 - test on minos-slf6
 - NFS 4.1 access to Bluearc
 - Access to the 2K newest GpGrid SLF6 slots
- Deploying CVMFS for access to OSG (including CMS & D0) - testing now
- Minerva using elm now, will verify lack of access then stop making dogwood
- Will remove all data and MC candidate files, freeing up 400TB of tape media.
- SCPPM meeting in early Feb to present our plans for next 4 years

GRID

- IFDH CP – 20.2 million locks served to Minos (10.5M NovA, 26.7M MNV)\
 - setup ifdhc -z /grid/fermiapp/products/common/db
 - Supports cpn, gridftp, others as appropriate, including access to Dcache
 - Uses dd to move files, much faster than cp used by cpn
- New jobsub architecture coming, merging minos25/54 and gpsn01 functions
 - Requires use of jobsub in place of minos_jobsub (setup jobsub_tools)
 - Automatic provision of proxies, no more login to minos25
 - HA High Availability, execution limits as needed, etc.
- CVMFS is supported in production now
 - /cvmfs/minoscfs.fnal.gov/ is set up now, empty at the moment
 - Deploying for code and shared files
 - Need to deploy and configure a new ups to hane new path

DATA handling - SAM

- SAMWEB is deployed for Minos
 - A web services SAM server, command line and URL access
 - Heavily in use in Minerva and NOvA
 - We should migrate to this from traditional sam
 - Examples soon <https://cdcvs.fnal.gov/redmine/projects/minos/wiki/SAM-LIST>
 - Can deploy by unwinding tarfile and running samweb binary directly
- Preparing to move SAM servers from minos-sam04 to new host
 - still in preparation, no firm date, experts busy with other things

DATA handling - Bluearc

- Bluearc overloads much lighter since Apr 17 separation of App and Data
 - Essentially no outages.
 - Will lock by file system, not group, in future (transparent)
- Returned 50 TB /minos/data2 - will move large datasets to Dcache instead
- /minos/app data cleanout/purge
 - moving user data files to /minos/data
 - Will imposed quotas, initially large
- Start using ifdh cp in place of cpn
 - Invokes cpn where appropriate, plus ftp etc when needed
 - Uses dd for faster file moving
 - setup ifdhc then ifdh cp ... (or standard setup_minos)

Enstore/DCache

- Dcache NFS 4.1 direct file access - requires SLF 6.4
 - Working now on minos-slf6
- ENSTORE SFA (Small File Aggregation) is deployed
 - We should use this to archive mcin_data and stage areas
- CD deploying 4 PB for IF
 - Deployed in productin mid November
 - /pnfs/minos/scratch available for files not backed up to tape
 - Gradually deploying more disk as needed
 - Configured as one one big read/write pool group

SCS/SDP news

- The SCD supported jobsub script does work for us
 - Beta testing a new jobsub which provides proxies transparently
 - HA service will handle jobs for all clients, to full Fermigrid scale
- MOUs are now called TSW. See Keith Chadwick's talk at this meeting.
 - Restructured around 'service' model

GPCF

minos-slf4 = minosgpvm02 runs SLF 4.7 32 bit kernel

- Still there for Minerva MC.
- Could go away at any moment

Deployed minos-slf6 for NFS 4.1 Dcache direct access tests

- Please finish certification of full processing chain
- Can read Dcache (/pnfs/minos) directly via NFS 4.1

Minos Servers

- SLF6 migration – just starting, use minos-slf6
- Mysql server will need to go from 5.0x to 5.5x or to Mariadb
 - Verify there is no effect on clients
 - DBA's will handle the upgrade
 - We need a database coordinator to lead this

Control Room / DAQ

- Control Room computers
 - Have 6 new 27" 1080p monitors, on 2 tables (had used 6)
 - Consolidated space to make room for uboone
- Control Room networking – managed switch being installed
 - new switch is installed and running
 - Removed the old DAQ/DCS switch from WH12 for security
- ECL – migrated more forms to the new editable format
 - Adding conditional fields and centered notes, WIP
- minos-om web server retirement
 - Static pages have moved to [nusoft.fnal.gov/minos/controlroom/...](http://nusoft.fnal.gov/minos/controlroom/)
 - cgi (FLUFFY) will move to new CD server soon-ish