

# EXECUTIVE SUMMARY

- Young Minos issues:
  - Finalizing Computing MOU and SCP/PPM/PMT budget request (30-50 TB disk)  
<https://cdcvs.fnal.gov/redmine/projects/admin/wiki/MNSCOMPMOU>  
<https://cdcvs.fnal.gov/redmine/projects/admin/wiki/PORTFOLIO>
  - Repeated Bluearc overloads by new small experiments - improved CPN
  - DOE grid certs going away March 2013, use OSG certs
- SLF5 - still need to certify reco
- Jan 17 Bluearc firmware update, should be non-disruptive
- Retired DBMAuto
- Migrated JIRA to Redmine
- Retiring most AFS data areas, pending copy to Control Room hosts.
- Need ND reco speedup to handle x3 data increase

# GRID

- CPN - 12.9 million locks served to Minos (4. M NovA, 15 M MNV )\
  - setup cpn -z /grid/fermiapp/products/common/db
  - Old /grid/fermiapp/minos/scripts/cpn is link to /grid/fermiapp/common/tools/cpn
  - cpn 1.3 of Dec 13 - avoids stale lock and queue entries
- IFDH - New layer on top of cpn will also support Gridftp, etc.
  - Not yet compatible with cpn, as of Jan 2013.
- jobsub script can be used by Minos/Minerva/NOva/et.al.
  - setup jobsub\_tools -z /grid/fermiapp/products/common/db
- Should start using the Bluearc GridFTP server for MC import.
- Local shared file support - CD investigating CVMFS
- DOE grid certs moving to OSG
  - Last renewals 2013 Mar 31, will expire in 1 year
  - Get OSG certs from <https://oim.grid.iu.edu>
  - Will have to re-register with DocDB ( OSG certs not accepted yet, 10 Jan )

# DATA handling

- SAM Projects have been run this year only to test the SAM Station.
  - Prototype lightweight script to delivers files like a SAM Project.
  - No progress lately, but very little work needed
- Preparing to move SAM servers from minos-sam04 to ifsamgpvm01
  - Should be transparent to us, no date set yet.\
- More Bluearc overloads due to new small users making mistakes
  - good performance Dec 10 onward
- Bluearc head crash Dec 10 00:45 to 02:19 - firmware fix to go in Jan 17
- Have requested separation of Bluearc App and Data, both volumes and heads.

# Enstore/DCache

- Open Hardware disk requested next year - no progress
  - Deployed cost under \$100/TB
  - Commercial systems good for Dcache, Enstore, SAM and for Bluearc backend migration.
  - Deployed at Petabyte scale by Backblaze and others
  - <https://cdcvs.fnal.gov/redmine/projects/minos/wiki/DATAPLANOPEN>
- NFS 4.1
  - DCache direct file access, as soon as we have clients ( SLF 6.3 ? )
  - ACL's in Bluearc, with a future Bluearc firmware release
- ENSTORE SFA ( Small File Aggregation) is deployed
  - We should use this to archive mcin\_data and stage

# REX/ELC

- The REX supported jobsub script does work for us
  - We should start using it in production
- IF Beam monitoring deployed for NovA era beam monitoring
  - Olga Terlyga will compare this to our beam data logging
  - Investigating IBEAM and/or Synoptioc to replace JAS
  - <http://dbweb3.fnal.gov:8080/ifbeam/app/Dash/index>
- A new CSL Computing Sector Liaisons group meets monthly, 2<sup>nd</sup> Wed.

# FERMIMAIL / DATABASE

- We have retired DBMAuto
  - There are no remaining clients of the Master.
  - Soudan now writes directly to Fermilab.

# GPCF

- Running XEN instead of former OracleVM - stable and good net perf
- minos-slf4 = minosgpvm02 runs SLF 4.7 32 bit kernel
  - Had to extend exemption, to finish Reco cert at SLF5
  - Could go away at any moment

# Minos Servers

- Moved to new IF production server (ifdb02 ) on Oct 18 2012
- Retirement of DBMAUTO is complete
- SLF5 migration - we need to certify reco built at SLF5.

# Control Room / DAQ

- System Management
  - New workstations are being tested - rc is done, moving to acnet, evd, om
  - Will move to newly installed hosts one at a time
- AFS
  - Will make a local copy of what is needed in CR, and stop using AFS releases
- FPCONSOLE
  - The system labeled minos-dcs will move underground
  - Access the screen via VNC (rdesktop)
  - Remove the DAQ/DCS network from WH12 for security
- JIRA migration to Redmine
  - Mengel archived the content to <http://nusoft.fnal.gov/minos/jira/>
  - We will use Redmine for future issue tracking of the JIRA style