

Messages I am Intending to Convey

- Staffing and permanence of ISA.
 - Under staffing of Lattice QCD.
 - Risks and Standing of Upper Storage.
 - Involvement in Beams Activities.
 - CDMS
- Various Successes.

Staffing and permanence of ISA

- Five are needed for 24x7 page rotation.
 - The group has 4 permanent staff.
 - ONE IS LIKELY CHRONICALLY ILL
- Staff requirements
 - Reason about complicated problems
 - Willing to work with “lab ware”
- Lev of effort req’ed
 - Group under-serves w .r.t it design mission.
 - QCD, dCache, media migration, evaluation and other projects.
 - Level of tape data movement is only ½ of DAMNAG
 - Never transfer of effort, despite substantial offloading of Expt operational responsibilities to ISD/ISA.

Lattice QCD(1)

- 128 nodes are arriving Dec 23.
 - Total will be 256. (2 mainframes).
- Operations under the supervision of a Sci. Prog committee commence ~2/03.
 - A parallel file system (OSD/Lustre is under consideration) by spring.
 - Documentation and stuff.
 - Interoperation with Jlab.

Under Staffing of Lattice QCD(2)

- Personnel:
 - Amitoj is stuck in India w/visa issues.
- Procedural:
 - Steering by an oversight committee.
- Development:
 - P4 optimizations.
 - Myricom/GE (or flexible) switch investigation (filled out mainframe).
 - Hayes investigation support (FPGA based serial mesh).
 - Parallel I/O API specification for SciDAC collab.

Risks and Standing of Upper Storage(1)

- Upper-storage== facilities layered above tape.
- Is a state of the art facility.
 - Vendors (I.E. zambeel, blue arc) are not equivalent, and were interesting in the dCache feature set.
 - Hope to elide into (at least lab-ware) mainstream –.
 - OSD/Lustre.
 - Vehicle for potential collaboration in a variety of ways.

Risks and Standing of Upper storage(2)

- Rather (too?) Successful expansion of central services to CDF, started with Enstore, ends with dCache.

“Must be made to succeed”, per CDF.

CDF student help?

Key element in SAM conversion – CDF have no tiers.

Aligned with strategy to reduce/eliminate SMP costs..

Aligned with technical desiderata for Ethernet SAN.

Aligned with ISD grid strategy:

GridFTP+, SRM.

Risks and Standing of Upper Storage(3)

- Usage [here](#).
- Need service level monitoring.
- Needs migration to ISA (admin model is complex).

Involvement in BEAMS activities.

- Main Injector
 - Viewed as Growth for Eric N.
- SDA analysis
 - Ron, Eric, Alex K.
 - Slows QCD, Dcache (mitigated by Wellner), sdss)
- Kryz. Genser emittance class,
 - Slowed NGOP.
- Don (main injector)
 - Slows Don

CDMS

- Responsibility for DAQ (Holmgren)
- This quarter is crucial.

CMS

- Needed –provide 1 FTE to CMS UF effort
- Apply basket of help and bill back,
- Needed – monthly meeting with Head, CMS dept to coordinate this.
 - Assure CMS satisfaction.
 - Untidy was of running the Dept.
 - Too busy to get to this.

Grid Fabric Viewpoint and Expertise.

- FTP
 - Grid FTP protocol , Mode E in all FTP, client, server implementations
 - Will collapse w/o 1.1 protocol changes related to scaling. – Mitigation is a tier of new servers.
- SRM – Dec collaboration meeting.
- Gram/Batch interfaces
- Site AAA collaboration
- Collaboration with M. Livney.

Mass Storage

- Successful 5 year collaboration with DESY group.
- Successful transformation of lab methods.
- All the responsibility that comes with managing state.
- Gaps: small files. Accounting DB. Needs ongoing effort. DRT Not Endorsed on Run II program. Technology.

Acceptance of Farms Related Technologies.

- Low maintenance and acceptance of FBSNG.
- FCP as traffic shaping – key to Ethernet SAN.
- Grid Portal
- Need leverage knowledge w/ Grid

Strength and acceptance of ISA group.

- Group is internally harmonious.
- Group is able to run appropriate projects
 - Example
 - T9940B Beta.
 - Mezzanine silo project.
- Group is valued by the Experiments
- Group is valued within the Dept.

RT-linux Steering Area

- Recognized contribution for D0 13.
- Thought to be unique center of skills within the CD, subsumed into ISD mission.
 - CMS unit test consults.
 - BD analytical work.
 - Others.