



Progress in DH since last review

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DH Review

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Reorganization



● Operations

- ➔ Following the recommendation of the committee we have identified an operations group.
 - CDF Task Force: Rick Colombo, Glenn Cooper, Jason Harrington, Richard Jetton, Mark Leininger and Mark Schmitz.
- ➔ Mark Leininger is training them for operations
 - ➔ **They also have duties in central and desktop administration.**
- ➔ Task force is getting some help from other CD departments

● Leadership

- ➔ Stephan resigned on Oct. 12 from both DH & Central Analysis Facility.
- ➔ I have temporarily stepped in as co-leader of DH with Terry Watts.
 - I concentrate on operations & Terry concentrates on development
- ➔ Terry will start teaching in January.
- ➔ We have identified two candidates for DH leadership
 - Requested they indicate by Nov 30 whether they would accept if offered.



Data Handling Resources



● Disk

- ➔ We've given 2.1 TB of disk to physics groups on fcdfsi2.
 - In addition to the 0.6 TB they already had.
- ➔ We've given 4 TB of disk to the DIM
 - In addition to the 4 TB that was already present.
- ➔ Another 4 TB has been successfully connected and tested.
 - Should be added to the DIM this week.
- ➔ Working on hardware problems connecting ~12 TB more.
 - One chassis gives errors that are not understood.
 - Also having problems with bad fibers connecting the disk to CPU.
 - Task force works on hardware in spare time away from sys admin.

● Tape Drives

- ➔ Following the recommendation of the committee we have increased the number of drives available on fcdfsi2
 - Increased from 3 to 11 drives.
 - Required significant amounts of Mark's time he wanted to spend training.
- ➔ Drives should increase the users ability to read data and the physics groups ability to produce secondary datasets on the disk we provided.
 - Unfortunately this will increase the operational difficulties that we are experiencing.
 - ➔ **See Mark Leininger's presentation on operations.**



Development



- Secondary Datasets
 - ➔ The physics groups are now able to write secondary datasets to tape.
 - This was released two weeks after review.
 - In previous review it was estimated it would take months!
 - ➔ DFCTestTapeWrite, written by Dmitri Litvintsev, has been tested by physics groups who have written at least one tape and read it back.
 - Physics groups are now organizing to write their secondary datasets from static disk to tape in the robot.

- Tape Handling
 - ➔ Work is proceeding on providing a reliable tape handling system.
 - See my talk later on a tape handling proposal.

- Test Stand
 - ➔ As recommended by the committee, we have setup a DH test stand.
 - Will be used to debug tape handling once we can setup DH tape software there.
 - Proved to be trivial to set it up to test DH use of Enstore, which we did successfully.



Operations



- We have been experiencing significant tape handling problems that Mark will report on in more detail.
- CD has assigned tape handling experts to help CDF assess it's current problems and recommend how to fix them.
 - ➔ The experts are Marc Mengel and Margaret Votava.
 - ➔ They are scheduled to begin working on the problems 11/26 – 11/28 and will then write an interim report.
 - ➔ If they cannot diagnose the problems, other experts will be called in, until somebody is found who can understand the problems.
 - Nobody will be exempt from being asked to help.
 - Once the problem is understood, we will develop and report a strategy for fixing it.
- We will fix the problems sufficiently to allow us to operate.
 - ➔ We cannot guarantee we will arrive at a permanently operable & supportable situation with the existing tape handling software and hardware.
 - ➔ See my "Tape Handling Proposal" and Don's "Enstore & Serial Media" for more details on how offline management recommends we proceed for the long term.