

IT HPSS planning 2001

Propose HPSS to be stopped by end of 2001

- CASTOR system is now sufficiently mature to take over the CERN user functionality previously done in HPSS. Some administration functions (eg repack to new media) are not yet ready.
- HPSS does not support the Linux EIDE disk servers (49 of 1.5 TB have been purchased).
- No evidence that HPSS is broadening its horizons beyond US supercomputing world. Parts of IBM are working to replace ADSM (server backup and archive) by a real migrating file system.
- We cannot afford the (skilled) manpower to run two systems with the ongoing commitment to make regular upgrades and stay in touch with the product even though this is only 1.2 FTE (spread over 3 people).
- There will be a modest annual cost saving of \$150K
- No hardware saving. The IBM servers and disks are at end of life and the tape drives and media (about 40TB) will be redeployed in CASTOR after the data is copied in to CASTOR.

Data Migration proposal (1 of 2)

- About 20TB of individual user files and 20TB of experiment files to be copied by us unless experiments/users prefer to do it themselves.
- Map /hpss/cern.ch/.... directories to /castor/cern.ch/....
- Leave all data in HPSS but inaccessible after migration till closedown.
- Negotiate with experiments a migration period and if some data is to be excluded.
- Warn users globally now (news, CNL articles). Closedown end 2001.
- All ccdb TAPES users (hence all physics HPSS users) already have CASTOR directories.

Data Migration proposal (2 of 2)

- First step will be all new 'hsm put' operations will go into CASTOR and 'hsm get' will look first in CASTOR then, if not found, in HPSS. The HSM_HOST environment variable will essentially be ignored during this phase. We propose to start this 1 June.
- Soon after we will start migrating individual users directory trees.
- For both experiment and user data if a file exists in HPSS and CASTOR the youngest version will be taken.
- Users (about 1000) and experiments will be mailed with above exceptions and status of migrations will be on web.
- Write access to HPSS directories will be blocked when a migration starts and read access when it has finished. Users directly using rfio commands (rfcp, rfdir etc.) and stagein/out -M will have to change from /hpss to /castor after their directories have been migrated.
- Migration of a user or experiment will be done in as short a real time as possible and can be scheduled with us since scripts will have to change in synchronisation. Reading scripts could be given a later deadline on request.