Overview Bit-preservation and some announcements

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DPHEP meeting 19.9.14

Web server

- We had a meeting to discuss long term web servers. Main outcome
  - The preferred solution is a dedicated archive web server
    - i.e. a virtual machine with dedicated NFS space
    - Static HTML – no scripts
    - Contact: DESY Web-Office: Thorsten Kluever
  - AFS depending web server cannot be guaranteed as a long term solution since AFS may at some (distant) point in time become obsolete
    - although afs-space will be kept, group directories, groups
  - Changing content should be separated from the archived content
    - E.g.: Standard Content Management System Web Office

As always solutions has to be found by the experiments IT provides infrastructure and consulting

New virtual machines

- **sp-sl5-ref – SL5.10 32Bit!** – with Puppet
- sp-sl6-ref – SL6.5 configuration with Puppet
  - each: 2 cores, 4G RAM, 64bit
    - only 8G local space:
      - /home/'user' just for config files etc.
  - Local user
    - sphoneu0, sphoneu1
    - spzeusu0, spzeusu1
    - sphermu0, sphermu1
      - I need your public ssh key: e.g.: ssh-keygen -C your.name@desy.de
        - » .ssh/id_rsa.pub
  - 1TB on /sphep common area (for both machines) with daily TSM backup
    - /sphep/h1|zeus|hermes
  - no /afs
  - **ROOT in /sphep/products/root/. There is a 64 bit and 32 bit version**
  - **Neurobayes will be removed**

Future of SL5

- **SL6 support until 2020**
- SL5 maintained until 2017 but
  - no new SL5 resources for BIRD (probably less)
- pal.desy.de: default SL6 from ~November on
  - for **tests pal41/42 now available**
  - no hep environment (desygroupset h1/zeus/hermes)
    - be aware of different/missing environment variables
  - no e.g. ini ROOT534
    - module load root/5.34
- BIRD SL6 nodes will get a unique puppet installation
  - for tests available: qsub -l puppet
- pal-sld5 until 2017
- In addition afs-based glite (grid ui) not available anymore
  - now on SL6 as local installation

HERA dCache

- HERA dCache is more than 13 years old and cannot be reasonably maintained
- HERA dCache will be set **read-only** end of 2014
- Planned **shutdown** mid of 2015
  - of course provided that all data is copied

Polarimeter Raw Data

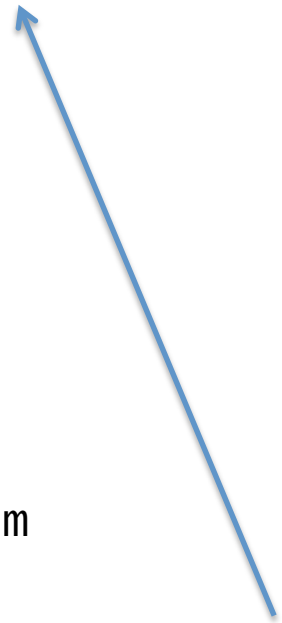
- /pnfs/desy.de/usr/desy/tpol/public
  - according to Blanka Sobloher polarimeter raw data (~1TB)
- Seems to be relevant for HERA data preservation
  - Any ideas?
- Will go to into archive
  - /pnfs/desy.de/dphep/archive/tpol
  - not online

Storage Structure

```
                                    /- h1
                                   |-- hera-b
                                   |-- hermes
                                   |-- tpol
                         /-- archive -- \- zeus
/pnfs/desy.de/dphep/     |
                         \-- online  -- /- h1
                                       |-- hera-b
                                       |-- hermes
                                       |-- tpol
                                        \- zeus
```

List files

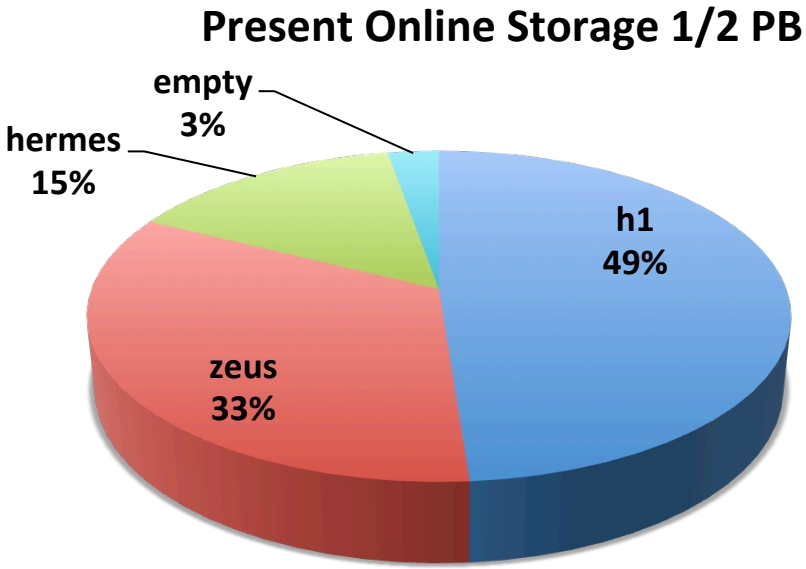
```
e.g. H1:
/pnfs/desy.de/dphep/online/h1/
|-- DPHEP/lists                    <- relation between archive
|                                        tar files and the
|                                    individual files inonline
|-- data
|-- mc
|-- mc2 -> mc                      < as link
|-- pseudocc                        < new
|-- noise
|-- random_sim
`-- shower
```



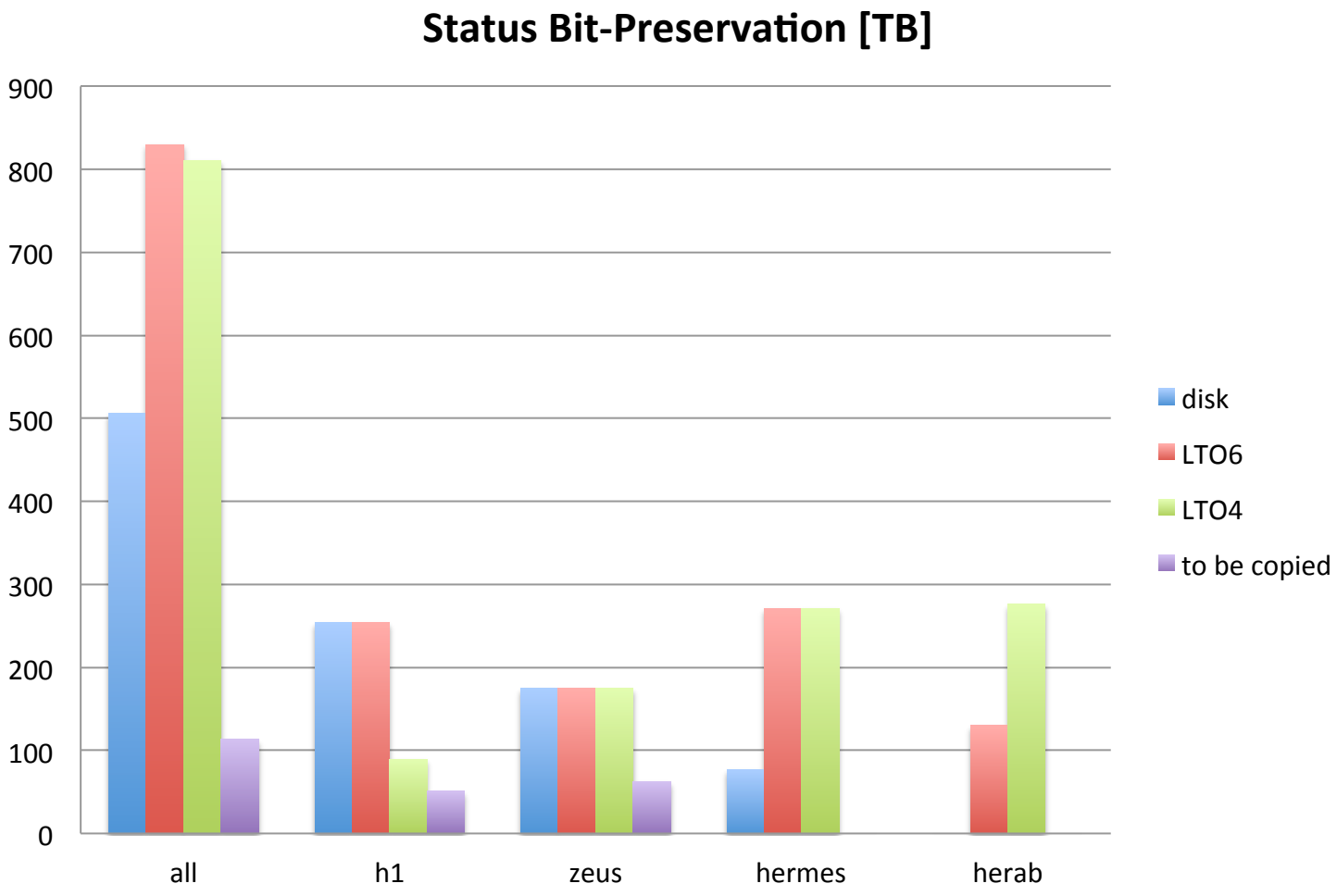
For each experiment
all files in the storage are listed here
This is the place to check whether all your data is stored

To be copied

- I've got (inherited from Dima) a list of files from H1 **~51 TB** – to be confirmed by Stefan
  - pseudocc had been added already
- A list of log files (~1/2 million) and a list of PAW ntuple **~62 TB** from ZEUS
- A "scratch" area (mainly MC despite the name) from HERMES had been copied to the online store but no tar files created 77TB yet
- About 115 TB to be copied
  - There will be in total about 620 TB online
  - Do you want to have all this data online?
- It seems that the selection process comes to an end
  - the legacy data set is defined



Overview Bit-Preservation



For the Statistics Enthusiasts: present storage content

H1	Hermes	Zeus	HeraB	type
509006	2007929 (+4450486)	483631	846059	raw files
5784	7269	4856	4104	tar files
106	404	267	393	LTO4 (800G) tapes
79	114	74	53	LTO6 (2.4T) tapes
254	77	175	0	TBytes online
89	271	175	276	TBytes on LTO4 tape
254	271	175	130	TBytes on LTO6 tape