The DESY Grid Lab in Action

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Hardware Setup of GridLab

32 nodes, 256 cores

GridLab Presentations/Publications

- P. Fuhrmann, "NFS4.1 Initiative", HEPIX'10 Cornell
- Y. Kemp et al., "NFS4.1 evaluation" CHEP2010
- G. Behrmann et al., "xrootd in dCache" CHEP2010
- P. Fuhrmann, EMI, dCache and standards", LBNL seminar
- P. Fuhrmann, "Report on NFS4.1", GDE 01/2011
- Fuhrmann, ESU User Forum, dCache Workshop
- S. Kalinin, "xRootd", dCache Workshop, Gottingen
- D. Ozerov, "Detailed local access protocol evaluation" HEPIX'11 Darmstadt
- P. Fix et al., Dell Technical White Paper, "A dCache Comparison for Tier2/3 LHC Research Sites"
- Y. Kemp et al., "Experience with HEP analysis on mounted filesystems", CHEP2012

Test of different protocols on the same hardware:

- NFS is clear winner.
- xrootd implementation in dCache is similar in performance to the one of the scalla daemon.

What are the limits of the system?

100TB large dCache system made from DELL R510 blocks

First limit: with more than 50 jobs/100TB efficiency drops below 70%.

Second limit: number of processed events stay flat for more than 80 jobs/100TB.

GridLab Activity

- nfs4.1 demonstrator
- tests of different hardware
- cernvmfs tests
- dCache testbed
- HC tests development

Open for your ideas!