

PDC site report

Harald Barth
Royal Institute of Technology
Kungliga Tekniska Högskolan
PDC
haba@kth.se

What?

- Swedish national center for HPC (one of three)
- Various international obligations (ex. LHC)
- 4 HPC clusters and odd stuff (BlueGene)
- 100 very active users, thousands in the DB

Why?

- One (\$HOME) file system on all systems philosophy
- Better than “uid” safety
- Other file systems come and go, AFS still around

How?

- 9 to 13 file servers, 3 DB:
Centos 5 on amd64/emt64 with OpenAFS 1.4.7 - 1.4.10
- 26T AFS data (65% full)
- 2500+ clients:
Centos 5 - 1.4.10 and “old school” OSes back to 1.2.11

Problems

- Batch system(s)
- Client cache configuration (memcache?)
- 1.4.X performance
- Big volumes with many small files
- Storage HW (SATA/RAID-6)

Todo

- Test OSD and related branches
- Test 1.5.X
- Test Infiniband

Thanks

- Questions questions?

<http://www.pdc.kth.se/>

Harald Barth <haba@kth.se>

Slides created with emacs and \LaTeX