

T2_BE_IHE

Dr. O. Devroede



Vrije Universiteit Brussel

Since last time

- Business as usual
 - Solving
 - Network problems
 - Hardware problems
 - » We replace 2 disks per week
 - Try to fix bugs that are related to changes elsewhere
 - » Which is sometimes really difficult to know
- BUT:
 - We are having fun :-)

Since last time

- Stéphane Gérard joined the team



At the CC



At the CC



UPS

- UPS
 - Interruptible power supply
- An agreement with the CC was made
 - They want to extend their UPS
 - We will contribute to a global system (T2+CC)
- One offer was received
 - Waiting for 2 others to decide

Sync with UCL

- Aim
 - Users can log in at IIHE and Brussels
 - With the same identification
 - And keep their environment
- Stéphane has been working on this
 - LDAP identification ready and tested at our site
 - Not yet in UCL
 - » But Pavel is alone now
 - Sync is still a problem
 - 2 solutions:
 - » Plain rsync
 - » Unison
 - We would like to give the user a 'veto'

New UIs

- Some people would like to work more 'interactively'
- UI's are sometimes overcrowded
 - Actually in bursts
- Proposal
 - Use 4 UI's
 - 2 for compilation
 - 2 for interactive running
 - » So code can always be developed

Direct submission

- Procedure exists for
 - Grid jobs
 - Generic jdl's and workflow exist
 - CRAB jobs
 - Only possible with CRAB_2_2_1_pre_2_IIHE
 - Tested up to CMSSW_2_2_7
 - Input Sandbox < 10Mb
 - » Else use the dedicated /localgrid directory

Crash Recovery

- Identified a number of
 - Services
 - That need a backup service
 - Machines
 - For which we need to buy a backup machine.

Change in DCache

- Move from Pnfs to Chimera

PNFS/Chimera provides name space functionality to dCache

- *Mapping from path to file/directory object.*
- *Storage of primary meta data (size, permissions...)*
- *Storage of dCache specific meta data (location)*

Change in DCache

– Why?

➤ Speed

- Improves with good data base implementation (Oracle, postgres)

➤ Scalability

- Speed improves with more cores, threads.(See next slide)

➤ Functionality

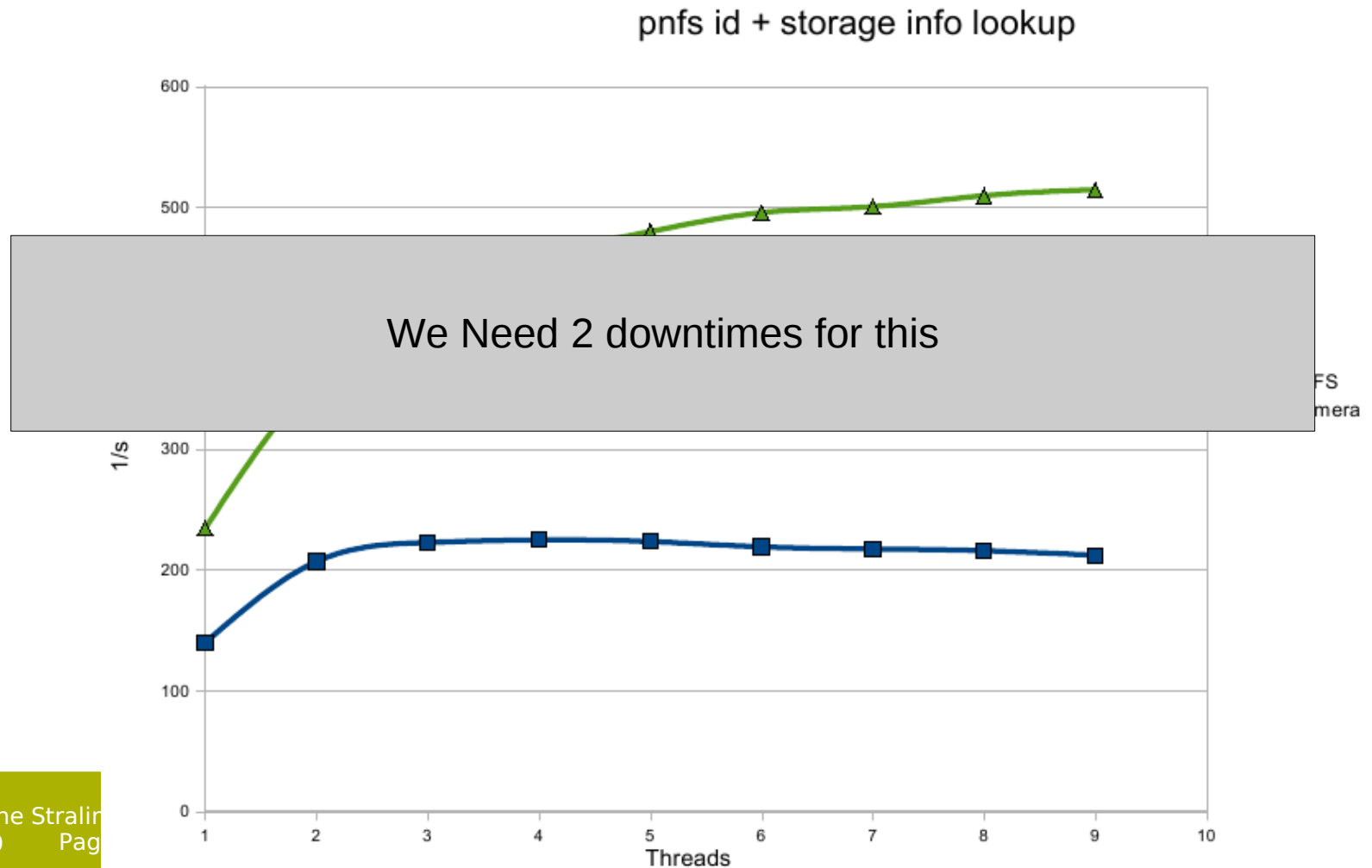
- Professional backup (Depends on DB)
- SQL queries
- Vendor/platform independent.

➤ Maintenance

- **Support for PNFS will sooner or later be reduced and discontinued.**

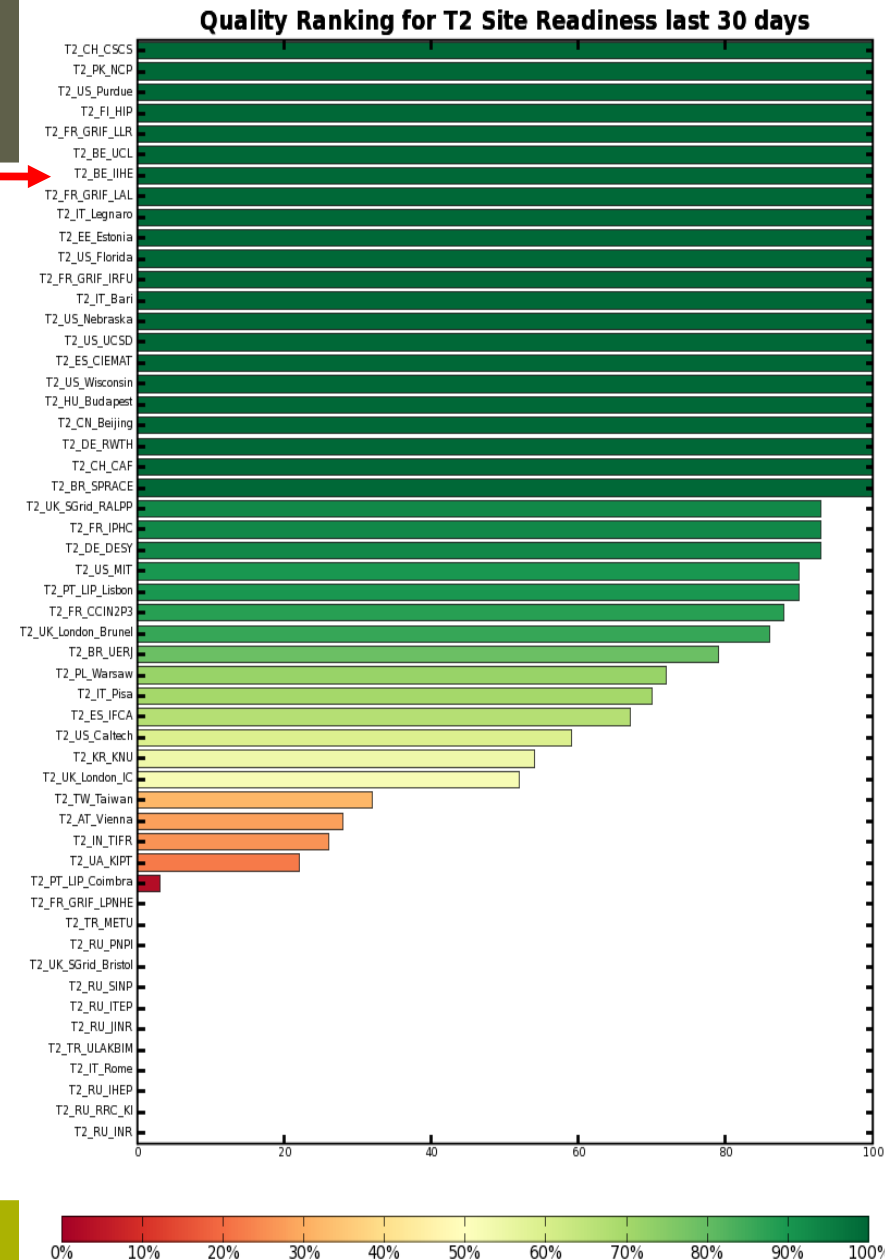
Change in DCache

- Why?



Some stats

- We are back to a good T2
- Have been at 10% for more than a month
 - Related to other supported VO and a shortage of personnel at belnet
- ~45.000 jobs/month
 - ~20% of our capacity



Top related datasets

- Lots of movements: deleted more than 20TB and got ~30TB back
 - All these operations seem to run very smooth
 - Deletions
 - 1_2_X, 1_3_X, 1_4_X samples
 - After consultation with users
 - Some users also request 'private data'
 - This is allowed if deleted when they do not use it any longer
 - And provided there is enough space

Top related datasets

- New samples

Data Level	Data Item	Files	Size
Dataset	/QCD_EMenriched_Pt30to80/Summer08_IDEAL_V9_reco-v1/GEN-SIM-RECO	6200	13.27 TB
Dataset	/QCD_EMenriched_Pt20to30/Summer08_IDEAL_V9_reco-v1/GEN-SIM-RECO	2810	6.08 TB
		9010	19.35 TB
Data Level	Data Item	Files	Size
Dataset	/TTJets_Threshold40GeV-madgraph/Winter09_IDEAL_V12_FastSim_v2/GEN-SIM-DIGI-RECO	145	155.38 GB
Dataset	/TTJets_Threshold10GeV-madgraph/Winter09_IDEAL_V12_FastSim_v2/GEN-SIM-DIGI-RECO	139	151.33 GB
		284	306.70 GB
Data Level	Data Item	Files	Size
Dataset	/WJets_ScaleUp-madgraph/Winter09_IDEAL_V12_FastSim_v2/GEN-SIM-DIGI-RECO	999	1.14 TB
Dataset	/WJets_ScaleDown-madgraph/Winter09_IDEAL_V12_FastSim_v2/GEN-SIM-DIGI-RECO	767	1013.90 GB
		1766	2.13 TB

News

- T2 inauguration
 - Next Friday: all cordially invited
- Grid day
 - 11 June
 - Crab use cases and general grid technology
 - Hands on workshop