dCache in 3 or 4 slides

by Patrick for the dCache Team
**dCache activities (Development)**

**SRM in general**

Resource Requirement footprint needs to be significantly reduced! Timur et al. are working on this.

**SRM 2.2**

Timur (Interface and DB) and Tigran (dCache core) plan to have the first WLCG compliant SRM 2.2 dCache ready mid of March.

**xRootd integration**

- Protocol plus 'non standard Alice' authorization done.
- Gsi Authentication planned.

**gPlazma**

- All protocols except xRoot integrated.
- GUMS integrated.
- Scripting workaround for non-GUMS (LCG) sites.

**Chimera (pnfs replacement)**

- First phase of development done (Tigran)
- Performance evaluation and code review in progress (Vladimir)
- Evaluating pnfs <-> chimera migration scenarios.
- ACL sub project started end of December. (David, Dirk)
gsiFtp improvements (Nordic Data Grid Facility)

- NDGF plans for single dCache instance spanning multiple countries.
- Need to improve current dCache gsiFtp implementation to avoid long data path.

Resilient dCache module (Alex)

- In great demand.
- Second, improved version in preparation.

Improved Monitoring

- SRM watch (Dimitry)
- dCache monitoring plots (Vladimir)
- much more is needed. (N.N)

nfs 4.1 (Tigran)

- nfs access to name-space and data.
- nfs4.1 supports distributed data locations (as dCache does)
- nfs clients will come for free.

HSM interface improvement (Jon and Patrick)

- very important for Tier I's.
- First version of central flush manager ready.
**dCache activities**  *(Testing and deployment)*

* Fully automated *code to product* chain [Owen,Vladimir].
  
  - checking out CVS archive
  - code compilation
  - RPM production
  - running test suite
  - publishing on web page and APT repository

* Slogan: dCache in 10 minutes (fast installation and configuration) [Owen,Ted]

* Adjusting dCache packaging to VDT needs in progress [Ted].

* Goal: only one set of RPMs for all distributions (dCache.org, CERN apt, VTD)

* CERN and dCache
  
  - production dCache in CERN repository
  - dCache certification done by CERN staff against dCache instance at DESY
Version management (for the near future)

- **1.7.0** current production version (Used by official production sites)
- **1.7.1** floating pre production version in preparation for SRM 2.2 (branch started last week)
- **1.8.0** first SRM 2.2 version (mid – end of March)

Funding

DESY, FNAL, OSG, d-grid, NDGF, (EGEE : very little and very unofficial)

**dCache Distribution**

**Tier I's**

- **1.7.0** : FNAL, BNL, gridKa, IN2P3, Triumf.ca, NorduGrid
- **1.6.6** : RAL (will move to Castor, because they need HSM)
  
  (PIC might move to dCache, if they find good, cheap, fast, reliable HSM back-end :-()

**Tier II's**

- non US : in the order of 40
- US : you know better