



Enabling Grids for E-science

## EGEE III plans of the CERN cluster

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## Planned activities:

- **DPM/LFC**
- **FTS**
- **GFAL and lcg\_util**
- **Information Systems**

**Encrypted Data Storage and Hydra goes to HIP**

- **DPM**
    - **implementation of SRM-copy**
      - the only missing method from the SRMv2.2 interface
      - making use of the experiences with the DICOM back-end
    - **quota support**
      - still needs to work out semantics with space tokens
      - discussing the behaviour with other storage developers
  - **possible code merge with Castor:**
    - **security**
    - **rfio**
- These would become shared components.**

- **Site grouping in channel definition (“clouds”)**
  - To make it easier to implement the computing models of CMS and ALICE, help with ATLAS’ operations
  - Being tested at CERN and some T1 (production) sites
- **SRM/gridFTP split for better throughput**
  - currently: transfer = srmGet, srmPut, gridftp, srmSetDone\*2  
will be changed to: transfer = gridftp
  - and SRM interaction will be handled in different states that gridftp transfers can fill the available bandwidth
- **Notification of job state changes**
  - ... ultimately using reliable messaging
- **WS-I compliant interface for Python clients**
  - non-backward compatible interface

- **thread safe re-implementation of GFAL, lcg\_util**
  - currently GFAL and lcg\_util uses global and thread specific structures
  - making use of an explicit and thread safe context will change the current API
- **ACL (and other file attribute) synchronization service**
  - SRMv2.2 setPermission() is progressing (DPM: full, dCache: basic, Castor: TODO)
  - service to keep permissions synchronized among file catalogs and SEs

- separating dynamic and static information
- working on compressed transport protocol between
  - site
  - top level
  - and top level cache BDIIs
- ensure that service discovery API is efficiently working
- performance tuning
- Glue schema evolution