

DPM Roadmap



DPM Team

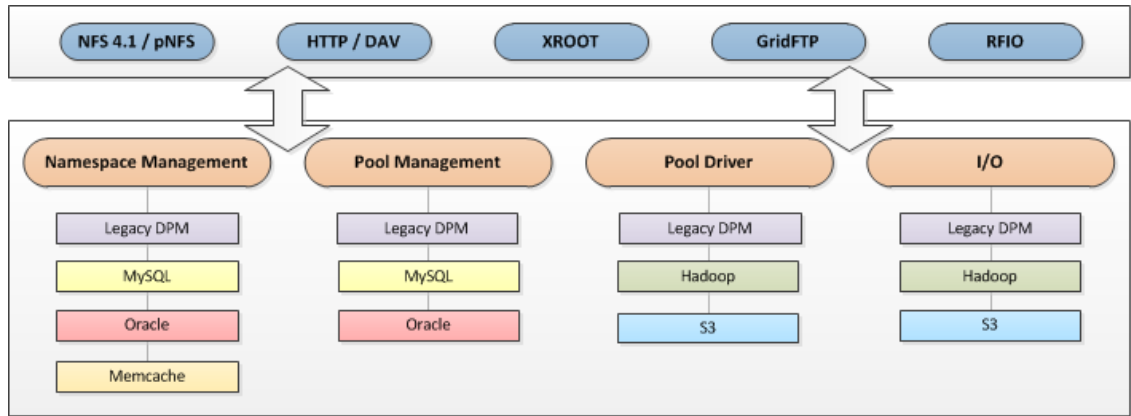
UK HEP System Managers Meeting

10th May – 11th May 2012

- 1.8.3 is out in EMI1
 - Fedora / EPEL packaging
 - Brand new HTTP / DAV frontend (read-only by default)
 - Synchronous GET requests (disabled by default, but do give it a try)
 - And some more bits and pieces
- EMI2 is just around the corner
 - All of the above
 - And the NFS 4.1 / pNFS frontend (which you might have if you are a beta tester)
 - And the first preview release of SEMSG
 - And SL6 support (Wahid already started trying it)

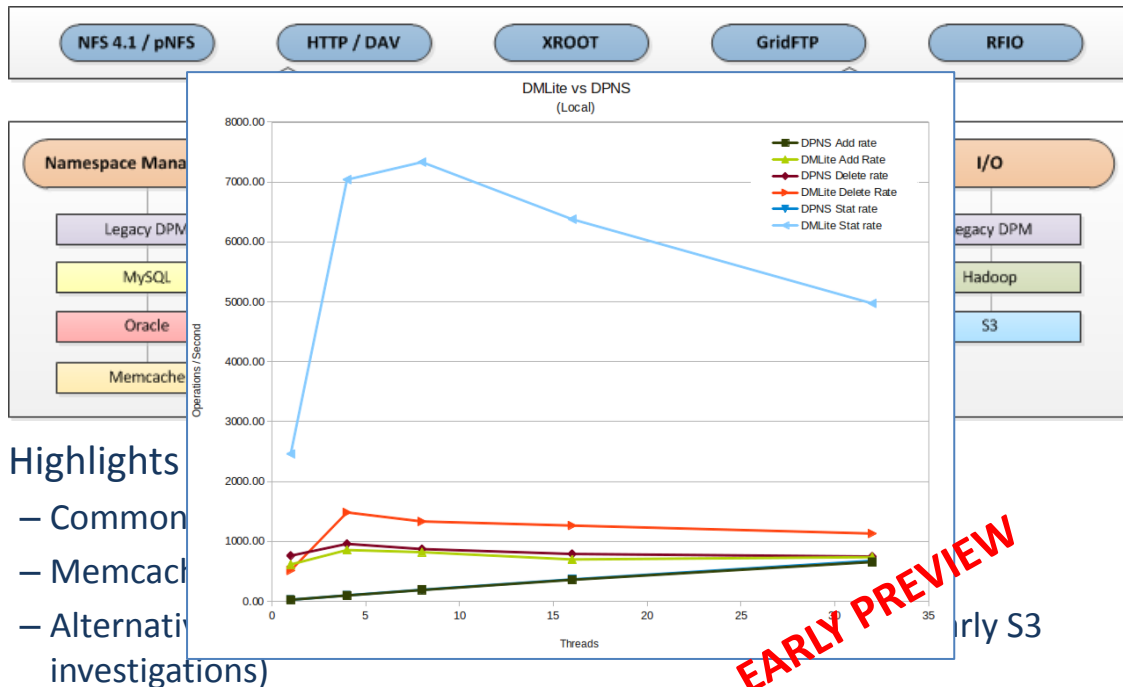
- Significant refactoring of the core
 - As you probably know by now
- Main goals
 - Remove dependency on the NS and DPM daemons for the new frontends (there was no other way to access metadata info)
 - Improve the database access performance (connection pooling, bind variables, optimized queries)
 - Ease code maintenance
 - Make DPM more open to other technologies

What's coming - DMLITE



- Highlights
 - Common API for all frontends
 - Memcached layer on top of the nameserver
 - Alternative pool backend integration (Hadoop prototype, early S3 investigations)
- When? DAV frontend EMI1 update will use DMLITE

What's coming - DMLITE



- Highlights
 - Common
 - Memcache
 - Alternative investigations)

EARLY PREVIEW

- When? DAV frontend EMI1 update will use DMLITE

- Most new core features will go into DMLITE
- DPM 1.8.4 work is ongoing
 - Lots of scheduled features, will need priorities
 - <https://svnweb.cern.ch/trac/lcgdm/query?group=status&milestone=LCGDM1.8.4>
- Highlights
 - New XROOTD plugin
 - Improved and automatic hot file replication
 - Improved logging (easier transfer tracing)
 - Cleanup of stale gridftp processes
 - Move space tokens among pools

- Check our online roadmap
 - We will keep our beta release program
 - <https://svnweb.cern.ch/trac/lcgdm/roadmap>
- We will pay close attention to the outcome of the upcoming WLCG Workshop
 - and the concrete recommendations from the TEGs
- In addition improving:
 - Monitoring (Nagios), conf and installation (Puppet) etc.

- Currently most sites run gLite
 - But some (15?) have started trying EMI1
 - Thanks Sam for staying on the edge!
- GEP (gLite Extra Packages) repository
 - Fills the gap, providing the new features (frontends, dmlite) to existing gLite installations
 - <https://svnweb.cern.ch/trac/lcgdm/wiki/Dpm/Dev/Components>
- Recommendation
 - Check recent email from Markus
 - EMI1/2 for new installations right now
- We **will** work hard in validating the migration

- 1.8.3 makes DPM even more sysadmin friendly
- 1.8.4 will be more feature oriented
- DMLITE makes DPM more flexible
 - And it will come with a lot of new things from the start, offering much improved performance to all frontends
- Improved XROOTD is one of the main requests
 - We are just finishing validation
- Check soon our CHEP12 poster and paper for all detailed information