

GridPP

UK Computing for Particle Physics

vo.DiRAC.ac.uk File Transfer update

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GRIDPP 37

Ambleside, August 2016



Science & Technology
Facilities Council



- Four sites

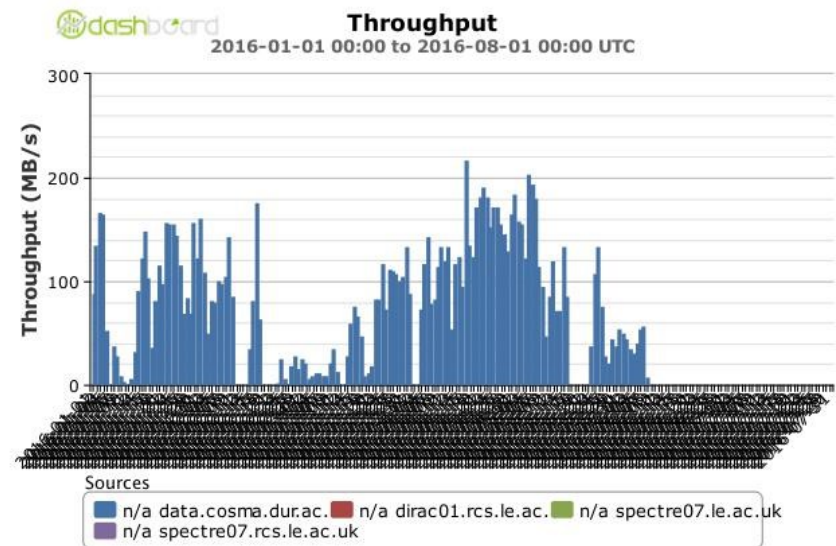
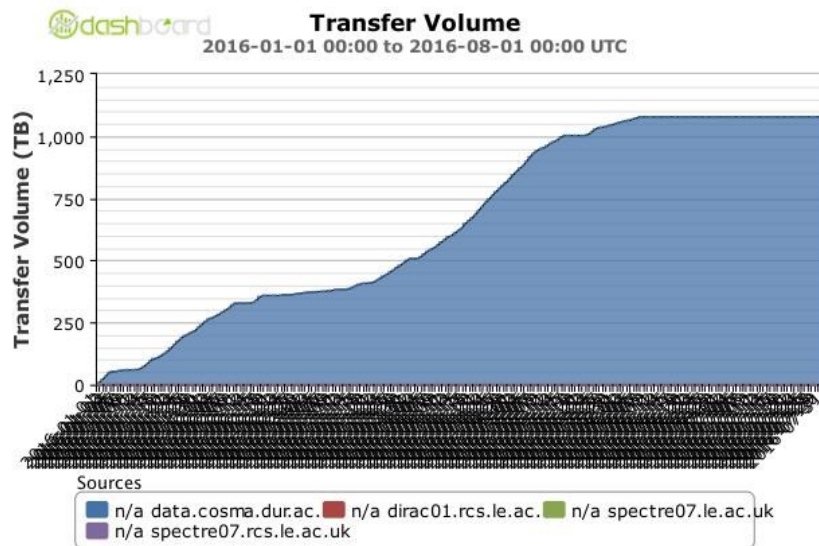
- Durham progressing (L.Heck)
- Leicester setup and ready for transfers (J.Wakelin)
- Currently Setting up HPC-Cambridge (S.Rankin)
- DAMTP-Cambridge still to do (J.Jäykkä)
- ECDF(RDF) still to do (S.Booth, A.Turner)
 - ECDF folks are different from GridPP Edinburgh



Vo.dirac.ac.uk Update

1.1PB copied in 5 Months
(Periods of reduced activity as
site admin calculates what to
move)

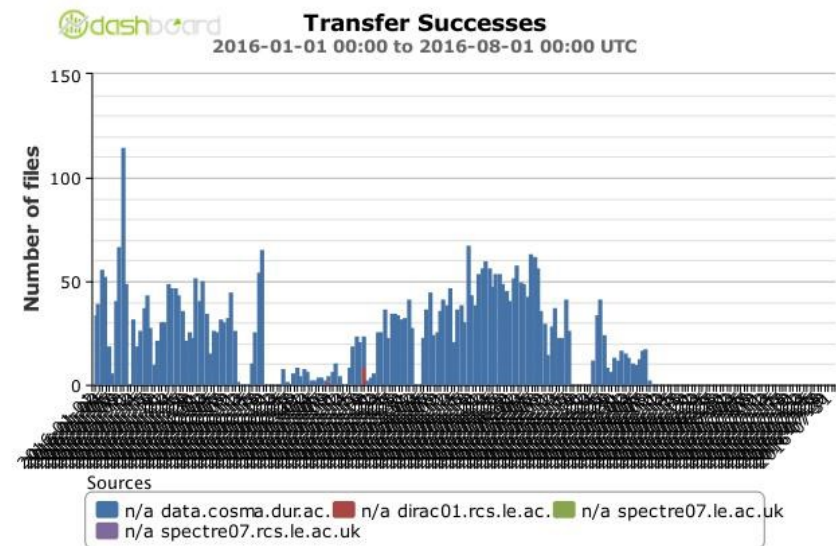
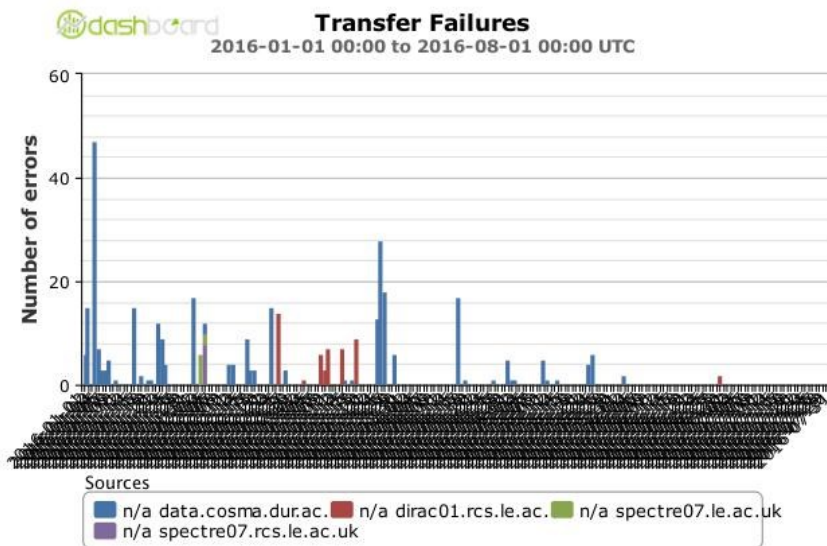
Peak Values 350MB/s
Daily Averages can reach over
200MB/s



Vo.dirac.ac.uk Update

Low failure rate

Low number of transfers since change to large file size



Durham

1.19785 PB of Data transferred in 6 months

126k files in total

Mean file size 9.45GB (96% files are smaller than this.)

Largest file 1.69TB

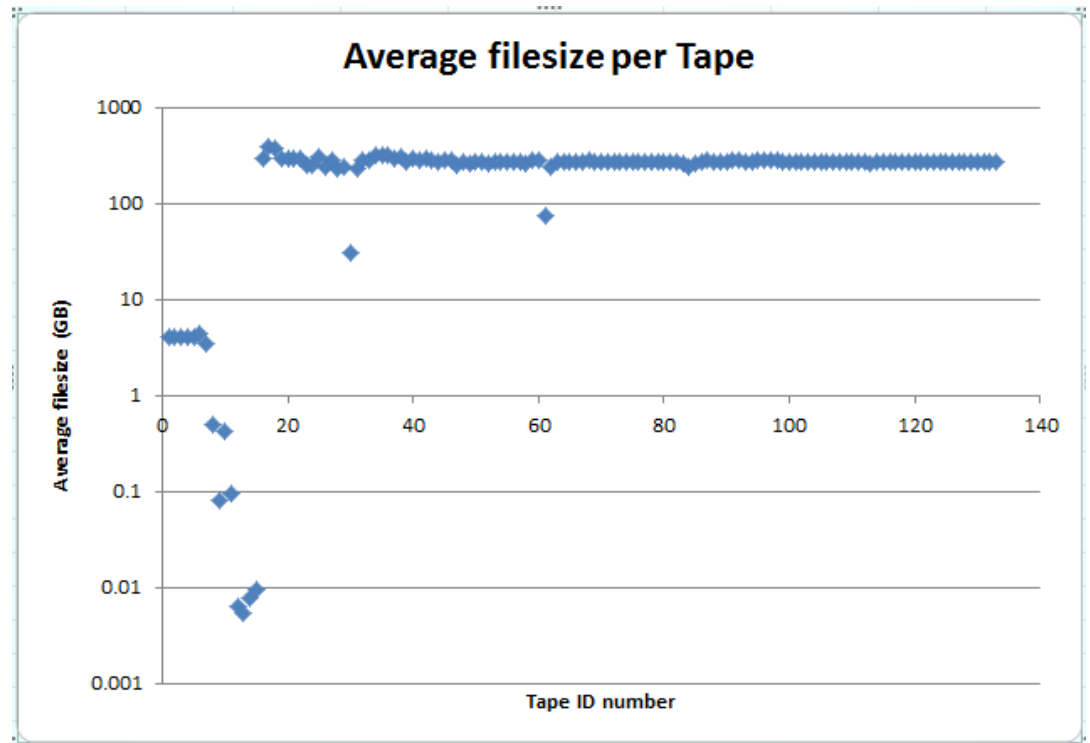
Median 6.5KB

3966 files larger than 100GB

Newer 250GB files leave unused space on tapes.

22TB over 126 Tapes (2.2% inefficiency (0.75/0.5 % for ATLAS/CMS.)

1.5PB still to transfer



- Manual creation of robot certificates method needs improvement.
 - Back and forth between user and CA not scalable
- Manual assignment to pool accounts for different institutes in gridmapfile tedious
 - (But necessary to keep data permissions separated whilst not using voms)
 - But using voms-proxies instead of grid-proxies lead to workflow issues due to renewals.
- Would we do the same with a new VO/user group
 - VO creation
 - New access methods
 - New Resources
 - Vo.dirac.ac.uk expected to represent ~8% of tape library capacity
 - Interest in GO endpoints as various sites already have these..

