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## Distributed Cluster dynamic storage: A comparison of dcache, xrootd and slashgrid storage systems running on batch nodes.

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The HEP department of the University of Manchester has purchased a 1000 nodes cluster. The cluster is dedicated to run EGEE and LCG software and is currently supporting 12 active VOs. Each node is equipped with 2x250 GB disks for a total amount of 500 GB and there is no tape storage behind nor raid arrays are used. Three different storage solutions are currently being deployed to exploit this space: dcache, xrootd, slashgrid (HTTP based). In this paper we will present a comparison of their ease of use and their performance from different perspectives: System management perspective (ease of installation and maintainance); user perspective (type of functionality and reliability); and from the performance point of view, with random and streamed access of files. The comparisons have been done with different conditions of load on the worker nodes, and with different file sizes. Test executables, user analysis jobs accessing data from real HEP experiments and file transfers clients have been used in these tests.

### Summary

Comparison of 3 different distributed storage systems (dcache,xrootd,slashgrid) running on the batch nodes of a grid cluster.

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