

dCache integration with CTA

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The ever increasing amount of data that is produced by modern scientific facilities like EuXFEL or LHC puts a high pressure on the data management infrastructure at the laboratories. This includes poorly shareable resources of archival storage, typically, tape libraries. To achieve maximal efficiency of the available tape resources a deep integration between hardware and software components are required.

The CERN Tape Archive (CTA) is an open-source storage management system developed by CERN to manage LHC experiment data on tape. Although today CTA's primary target is CERN Tier-0, the data management group at DESY considers the CTA as a main alternative to commercial HSM systems.

dCache has an exible tape interface which allows connectivity to any tape system. There are two ways that a le can be migrated to tape. Ether dCache calls a tape system specific copy command or through interaction via an in-dCache tape system specific driver. The latter has been shown (by TRIUMF and KIT Tier-1s), to provide better resource utilization and efficiency. Together with the CERN Tape Archive team we are working on seamless integration of CTA into dCache.

This presentation will show the design of dCache-CTA integration, current status and first test results at DESY.

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