

Hardware provisioning for CTA

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The CERN Tape Archive (CTA) was designed to meet the demands of data archival from the LHC experiments, in terms of both data volume and throughput. In order to ingest data at the rates demanded by the LHC data acquisition (DAQ) systems, the system is built on EOS and CTA's scalable architecture principles. To optimise the performance of both disk and tape hardware and to achieve the desired I/O rates, the hardware must be provisioned appropriately. This talk will present a high-level view of the global CERN tape service configuration and dive into the details of how the required performance is achieved. We start from benchmarks of the SSDs used as the building blocks for the tape buffer and work up to the full service configuration, based on commodity hardware as used at CERN/WLCG Tier-0. This talk aims to outline the factors that a Tier-1 site who wants to deploy CTA should take into consideration.

Author: LEDUC, Julien (CERN)

Presenter: LEDUC, Julien (CERN)

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