

Systematic benchmarking of HTTPS third party copy on 100Gbps links using XRootD

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The High Luminosity Large Hadron Collider provides a data challenge. The amount of data recorded from the experiments and transported to hundreds of sites will see a thirty fold increase in annual data volume. A systematic approach to contrast the performance of different Third Party Copy (TPC) transfer protocols arises. Two contenders, XRootD-HTTPS and the GridFTP are evaluated in their performance for transferring files from one server to another over 100Gbps interfaces. The benchmarking is done by scheduling pods on the Pacific Research Platform Kubernetes cluster to ensure reproducible and repeatable results. This opens a future pathway for network testing of any TPC transfer protocol.

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