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An optimization of the ALICE XRootD storage cluster at the Tier-2 site in Czech Republic

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ALICE, as well as the other experiments at the CERN LHC, has been building a distributed data management infrastructure since 2002. Experience gained during years of operations with different types of storage managers deployed over this infrastructure has shown that the most adequate storage solution for ALICE is the native XRootD manager developed within a CERN - SLAC collaboration. The XRootD storage clusters exhibit higher stability and availability in comparison with other storage solutions and demonstrate a number of other advantages like support of high speed WAN data access or no need for maintaining complex databases. Two of the operational charasteristics of XRootD data servers are a relatively high number of open sockets and a high Unix load. In this contribution we would like to describe our experience with the tuning/optimization of machines hosting the XRootD servers which are part of the ALICE storage cluster at the Tier-2 WLCG site in Prague, Czech Republic. The optimization procedure, in addition to boosting the read/write performance of the servers, also resulted in a reduction of the Unix load.

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