

O2 Disk Buffer - WP15 EOS Performance Testing Framework

Monday 5 February 2018 14:20 (20 minutes)

The ALICE Online/Offline (O2) Disk Buffer project will deploy a 60PB EOS filesystem at CERN to accommodate the Pb-Pb data taking period planned for 2020. An initial ~6PB evaluation system is planned for deployment in May 2018.

Members from CERN, Oak Ridge National Lab (ORNL), and Lawrence Berkeley National Lab (LBNL) are collaborating on Work Package 15 (WP15) in the development of a performance testing and evaluation framework.

One objective of the framework is to validate the O2 disk buffer storage environment through the development of an EOS testing framework which uses synthetic (fio, etc.) and simulated O2 workloads under expected levels of concurrency for standardized, reproducible results and SE performance analysis.

It is envisioned this framework may be of value to the EOS community for storage design and performance evaluation decisions and benchmarking.

This talk presents a design overview of the planned testing framework modules, their implementation, and how to contribute to the development effort.

Authors: EBY, Pete (Oak Ridge National Laboratory - (US)); GALLOWAY, Michael Dean (Oak Ridge National Laboratory - (US))

Co-authors: PORTER, Jeff (Lawrence Berkeley National Lab. (US)); BETEV, Latchezar (CERN)

Presenter: EBY, Pete (Oak Ridge National Laboratory - (US))

Session Classification: Using EOS