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Distributed filesystems performance tests on Kubernetes/Docker clusters

Modern datacenters need distributed filesystems to provide user applications with access to data stored on a large number of nodes. The ability to mount a distributed filesystem and leverage its native application programming interfaces in a Docker container, combined with the advanced orchestration features provided by Kubernetes, can improve flexibility in installing, monitoring and recovering data management and transfer services. At INFN-CNAF some distributed filesystems (i.e. IBM Spectrum Scale, CephFS and Lustre-ZFS) deployment tests with Kubernetes and Docker have been conducted recently with positive results. In this work we are presenting results of I/O performance study of these filesystems deployed on non-virtualized (bare metal) resources.

Significance

References

Speaker time zone

Compatible with Europe

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