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# AFS + Object Storage

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In a common project between CERN, CASPUR, and RZG an AFS
extension to support object
storage has been developed. The Object Storage Devices (OSD)
are loosely based on
SCSI T10-standard and uses the mature AFS components
rx-interface to the network and
namei-interface to the disks. The AFS fileserver got a new
role as
OSD-metatdataserver. A ubik-database to store information
about OSDs has been
developed. The AFS-client has been restructured to allow for
direct parallel access
to OSDs. This technique allows to distribute files belonging
to an AFS-volume over
multiple OSDs and offers new techniques such as
write-replication of files and
file-striping. Also a legacy interface has been implemented
to allow any old AFS
client access to data stored in OSDs. In March a stress test
of the beta-version took
place at CERN with 120 clients and 8 servers showing
stability and the expected
scalability and performance.

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