



Open Source Distributed Storage System
No Single Point of Failure
High Performance
Object Storage
Scalability

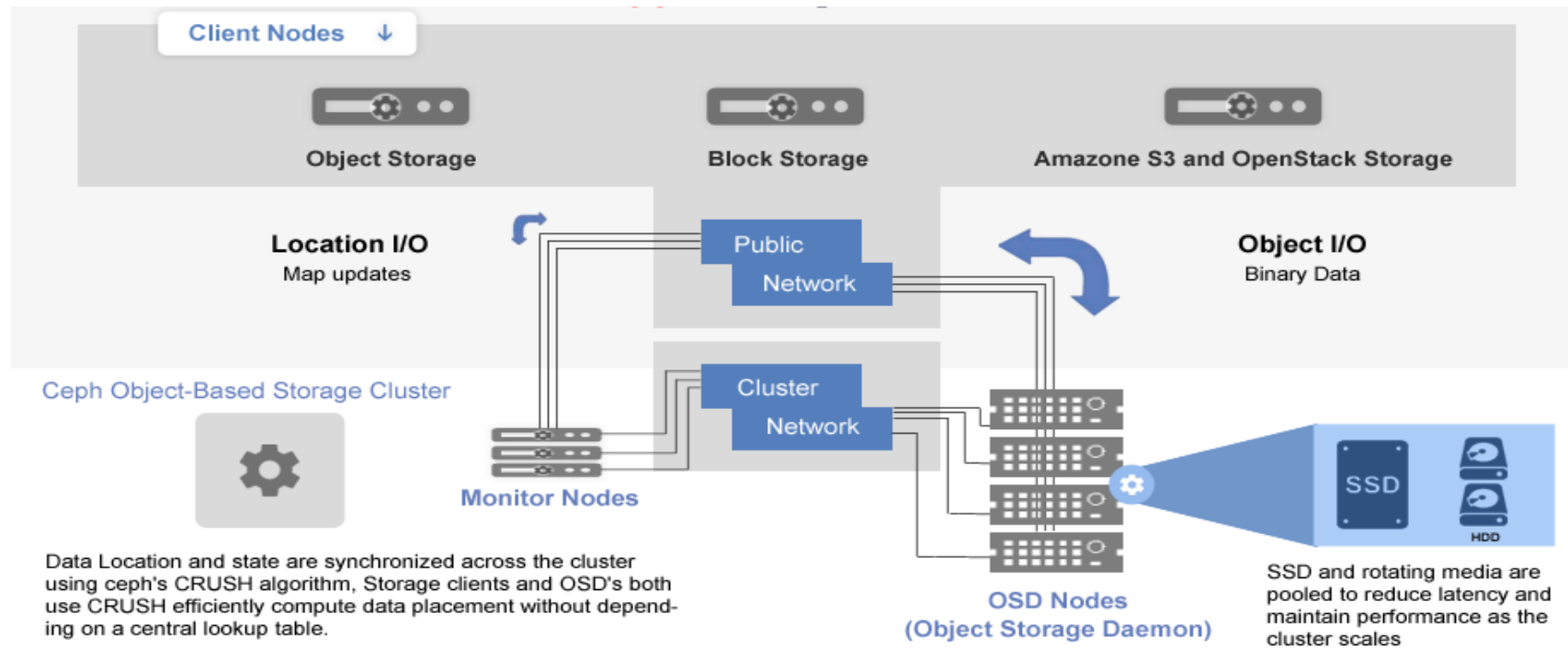


Image Source - <http://www.ironnetworks.com/>

Object Storage -- Data itself, Metadata, and a globally Unique Identifier

RADOS (Reliable Autonomic Distributed Object Store)

Replication -- Each file entering the cluster is saved in one or more objects and the object is saved multiple times in the cluster

CRUSH (Controlled Replication under Scalable Hashing)

Distribution of Data – Load Balancing – No Shared Component – No Centralized Bottlenecks– Cluster Nodes as Managers of Data

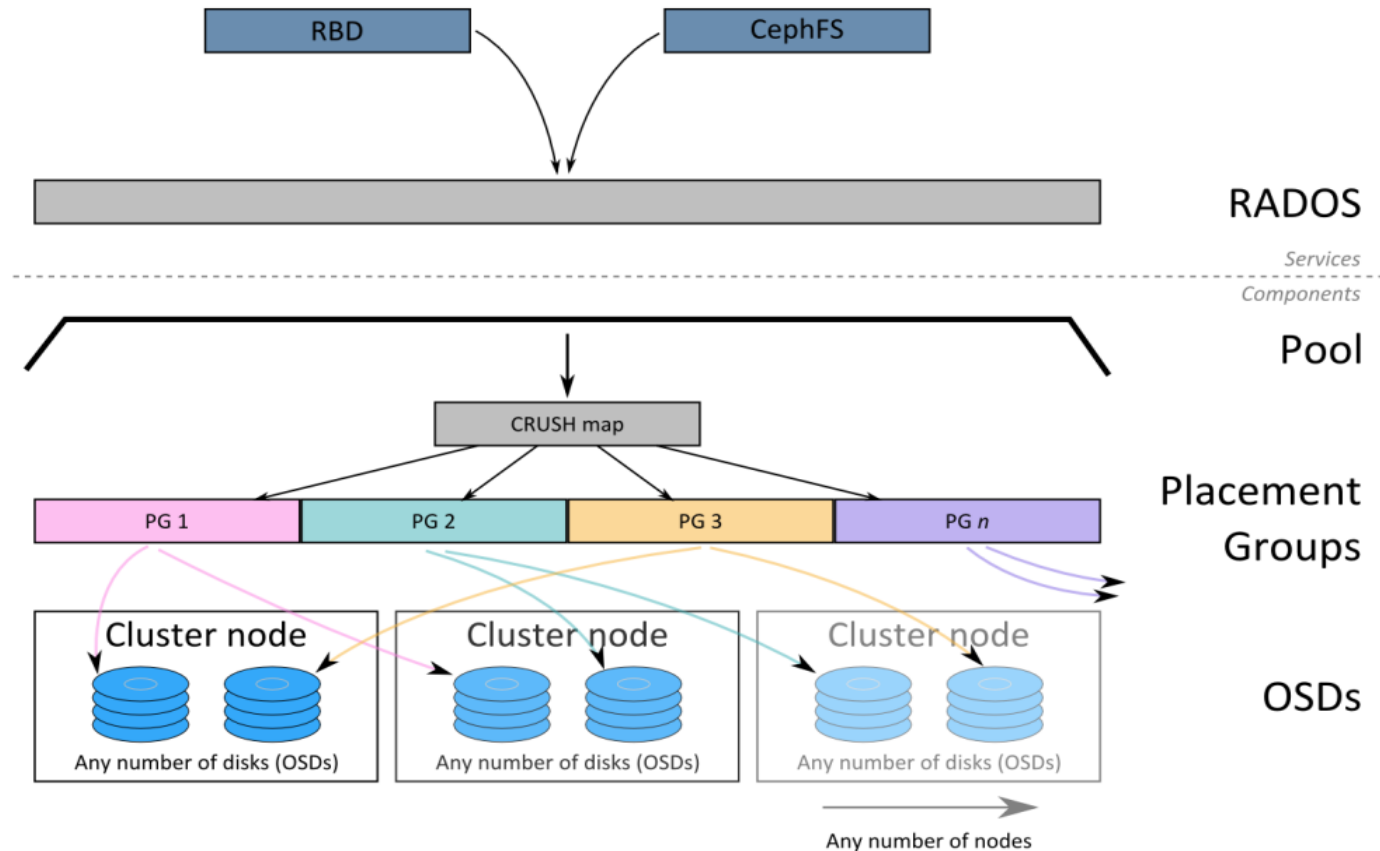


Image Source - <http://docs.ceph.com/>

CEPH at UTSA

- 4 Node Cluster
- Each node with 12 drives (8 CMR HDDs + 4 SSDs)
- OS and Metadata on SSDs
- 1 gig and 10 gig network

Comparison parameters ---

- Use HP Smart Array/ Avago MegaRAID
- Metadata on HDDs
- Frame Size

Aim ---

- latency
- Response time
- IOPS