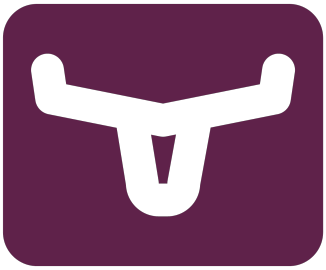
LONGHORN → Cloud Native distributed block storage for Kubernetes

→ CNCF SANDBOX PROJECT



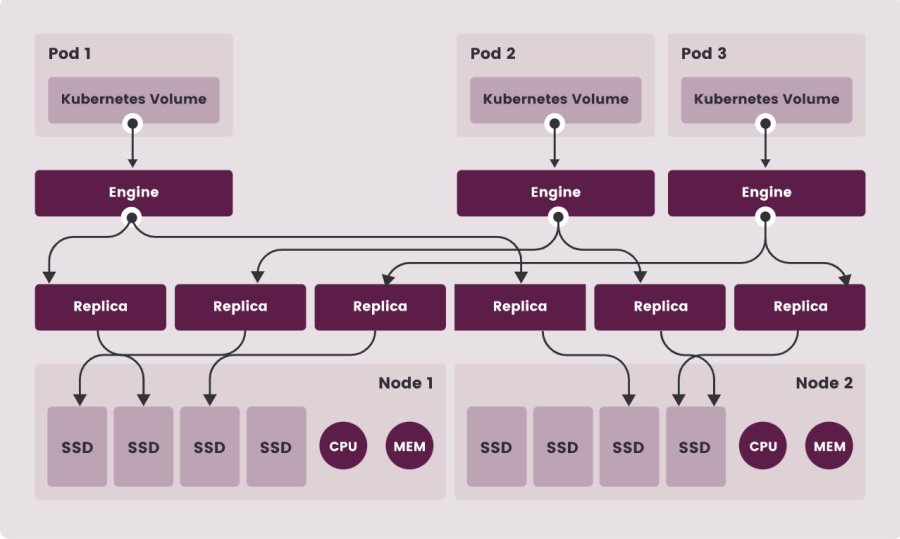
→ Easy to Install
→ Easy to Configure
→ Use Node disk for storage
→ Inbuilt UI

→ Easy to Use

Persistent container storage solution

→ Stateful apps made easy with Longhorn
→ Replication
→ Backup to external storage NFS, minio
→ DR planning
→ Restore
→ Backup Scheduling + Snapshots
→ Smooth upgrades

SO MANY USES



L Manager Pod
- → every Node (DS)
- → API Server
- → Create + Manage Volumes
- → creates Engine

There are three instances with Longhorn volumes.
Each volume has a dedicated controller, which is called the Longhorn Engine and runs as a Linux process.
Each Longhorn volume has two replicas, and each replica is a Linux process.
The arrows in the figure indicate the read/write data flow between the volume, controller instance, replica instances, and disks.
By creating a separate Longhorn Engine for each volume, if one controller fails, the function of other volumes is not impacted.

With 1.1.0 → Built in ReadWriteMany Support

→ ARM64

→ CSI Snapshotter

→ Prometheus support