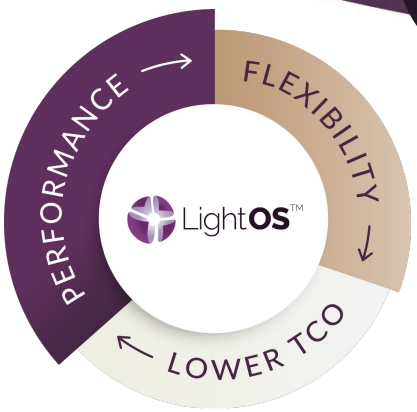
lightbits

INTRODUCTION

Lightbits Labs
Hyperscale Storage for All



Lightbits Labs leads the **cloud-native** data center transformation by delivering **scalable** and **efficient** software defined storage that's **easy** to consume. Lightbits brings the agility of hyperscale storage to private clouds and edge clouds. The company pioneered NVMe/TCP, making the solution easy to deploy at scale while delivering local flash performance. Lightbits Labs is backed by strategic investors Cisco Investments, Dell Technologies Capital, Intel Capital, and Micron.

Lightbits LightOS™ provides a high performance, highly available software-defined block storage product. It delivers scale-out, composable NVMe/TCP storage that performs like local flash that simplifies infrastructure management and operations while lowering cost. Edge clouds and private clouds use LightOS to provide 'NVMe as a service' – logical volumes with consistent low latency to compute nodes. Modern cloud native apps access storage that scales independently and are unaffected by SSD failures or node failures. This efficient software storage solution supports flexible hardware configurations with rich data services.

Clustered/Failover Storage Solution

- Scalable to 16 storage targets
- Failure domain awareness
- Multipath volume failover
- Partial drive and target rebuild

High Performance and Low Latency

- Max IOPS per Target Server:
  - 4K Random R/W: 3.5M / 800K IOPs
- Latency Per Target Server, 2x replication:
  - 4K Random R/W <=200µs / <=300µs
- Max Bandwidth per Target Server:
  - 20GB/s reads / 8GB/s writes

Storage Services

- Thin provisioning
- Compression, Snapshots and Thin Clones
- Elastic RAID for drive failures
- Volume HA replication (1x, 2x or 3x)

Application Environment Support

- Bare Metal, Kubernetes v1.13+ via CSI and Openstack "Queens" + via Cinder
- Standard Linux NVMe-oF client/initiator

Management

- RESTful API and CLI
- Non-disruptive cluster upgrades