

Lightbits Data Platform for Private Clouds

Build Your Cloud with Software-Defined Storage for Performance and Efficiency



PERFORMANCE AT SCALE

- Up to 75 million IOPS with sub millisecond tail latency
- Perfect for storage-intensive SQL and NoSQL databases and large-scale virtualization, and latency-sensitive workloads
- Built on the power and simplicity of NVMe/TCP



COST EFFICIENCY

- Up to 80% lower TCO compared to DAS, SAN, and HCI storage
- Scale processing power and capacity independently to maximize resource utilization
- Thin provisioning and compression to increase effective storage capacity



HIGH AVAILABILITY & RESILIENCY

- Clustered architecture provides high availability and dynamic resource scaling
- Synchronous replication within or across zones
- Built-in fast, efficient snapshots and database clones
- Multi-tenancy with Quality of Service assurances

Cloud computing and cloud-native architectures have gained traction due to their ability to run and operate applications with greater flexibility—and often, with lower costs than traditional technologies and approaches. While the hypervisor public cloud providers are at the forefront, many enterprises are deploying their own private clouds as an alternative that's more controlled and often lower cost. They're turning to software-defined storage that delivers scalable capacity and performance with greater efficiency than storage-attached networks (SAN), directed-attached storage (DAS), or hyper-converged infrastructure.

The Lightbits data platform brings hyperscale efficiency and flexibility to your private or hybrid cloud. Designed for demanding databases and cloud-native applications, Lightbits delivers software-defined block storage with an unmatched combination of performance, resiliency, and scalability. With Lightbits in your data center, you can simplify infrastructure management and operations while lowering costs.

ENSURE HIGH PERFORMANCE AS YOU SCALE

The Lightbits data platform scales beyond the petabyte level and delivers extreme performance of up to 75 million IOPS and consistent sub-millisecond latency even under a heavy load. This exceptional performance profile makes it the ideal solution for databases, analytics, and modern cloud-native applications. Built by the inventors of the NVMe®/TCP protocol, Lightbits delivers exceptional performance using standard TCP/IP networks and Ethernet NICs without requiring any configuration changes. No proprietary software is installed on client systems.

GAIN EFFICIENCY TO LOWER YOUR TOTAL COST OF OWNERSHIP

Lightbits can lower your TCO by up to 80% with its greater operational efficiency. Where application servers with local NVMe are often 15-25% utilized, Lightbits clustered, disaggregated storage allows you to scale performance and capacity independently and dynamically to maximize utilization. Lightbits' clustered architecture eliminates service disruptions if nodes or drives fail or become inaccessible, heals itself when nodes or drives are replaced, and supports non-disruptive rolling software upgrades.

MAXIMIZE RESOURCES WITH ENTERPRISE DATA SERVICES

Lightbits offers the essential data services of legacy SAN storage. To maximize your storage resources, Lightbits optimizes SSD media through smart data placement, thin provisioning, and compression for up to 4:1 total data reduction. This intelligent flash management can also extend flash media endurance by up to 20 times.

Space-efficient snapshots provide near-instant restores for data protection, and fast clones enable DevOps to innovate at the speed of NVMe. Multi-zone synchronous replication across racks or data centers provides resiliency for business continuity. To support mixed workload environments, Lightbits provides multi-tenancy with Quality of Service capabilities to prevent resource hogging. All at no additional cost.

IDEAL FOR A RANGE OF CLOUD DEPLOYMENTS

For Databases. With up to 75 million IOPS with sub-millisecond tail latency, Lightbits provides the ideal platform for storage-intensive SQL and NoSQL databases, from transactional databases with high user demand to real-time analysis data pipelines, to high-intensity AI-oriented database workloads.

For Kubernetes. Support hundreds of Kubernetes clusters from a single Lightbits cluster that delivers performance equivalent to local NVMe flash. Gain persistent volumes via a CSI plugin that delivers seamless support for microservices, and snapshots and clones for portability.

For Virtualized Environments. Manage virtual machine images and datastores in VMware and OpenStack efficiently. Easily replicate your virtual server images and assign them out to virtual machines—no cumbersome and time and space-consuming copying processes are required.

For DevOps. Clone multi-terabyte databases nearly instantaneously to shorten the time to market. Developers can apply, test, and validate changes using minimal storage capacity and without disrupting production systems.

For Cloud Service Providers. A single Lightbits cluster provides multi-tenancy for multiple heterogeneous environments. Lightbits Quality of Service (QoS) ensures your users won't notice any service impacts.

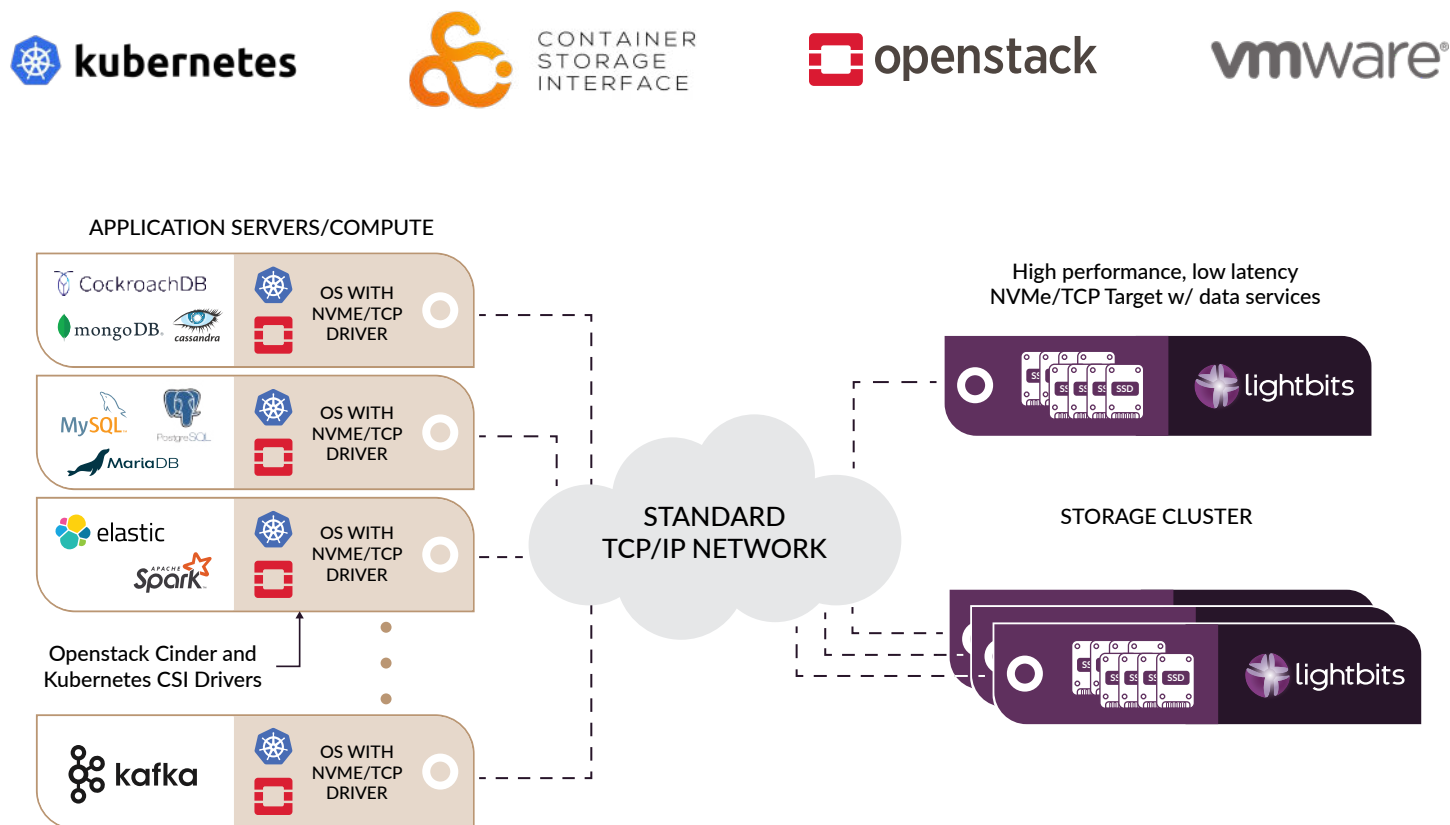


Figure 1: Lightbits clusters unify storage resources like a SAN and provide high availability by design.