lightbits

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SOLUTION BRIEF

Top 5 Reasons Why Lightbits Labs for OpenStack

Lightbits Labs™ offers a high-performance, software-defined block storage solution that integrates seamlessly with OpenStack® environments. Here are the top five reasons to consider Lightbits for your OpenStack deployments:

1 Unmatched Parallel Performance

When your business demands extreme performance and unmatched flexibility—like during the holiday rush or high-stakes events—scaling becomes mission-critical. Lightbits storage software enables you to effortlessly create hundreds of new Physical Volume Claims (PVCs) at scale without compromising IOPS or increasing latency for your running applications. And it doesn't stop there—snapshots and clones are just as seamless. With Lightbits, your infrastructure powers through the toughest challenges with ease, ensuring your business is always ahead.

2 Unleashing Peak Performance for Every Volume in OpenStack

OpenStack thrives on managing thousands of smaller VMs using large datastores to serve the volume needs. Scalability becomes crucial as new applications are deployed and customer demand soars. As the demand for volumes grows exponentially, Lightbits ensures unparalleled IOPS and ultra-low latency, providing industry-leading performance even in the most resource-demanding environments. With Lightbits, your OpenStack environment isn't just ready to scale—it's primed to deliver exceptional performance.

3 Effortless Live Migration with OpenStack Volume Retype

Lightbits seamlessly integrates with OpenStack via the Cinder driver, enabling effortless migration between volume types with zero performance bottlenecks—empowering you to retype multiple volumes simultaneously without compromising speed or efficiency.

4 Disaggregated Storage

The true advantage of disaggregation is that it allows for seamless scaling. By separating storage from compute resources, businesses can expand storage capacity independently of compute power, enabling cost-effective growth without limitations. This is particularly ideal for environments like OpenStack, where managing large-scale virtual machines and block storage volumes can be a challenge. Lightbits' NVMe® over TCP (NVMe/TCP) architecture allows businesses to achieve unparalleled flexibility and scalability in their cloud infrastructure, making disaggregation a powerful advantage for future-proofing their storage systems.

5 Scalability, Resiliency and Cost Effectiveness

Lightbits combines scalability, resilience, and cost efficiency to deliver a transformative storage solution. Its software-defined architecture enables independent scaling of compute and storage, offering unparalleled flexibility to meet evolving workloads and business needs. High availability is ensured through seamless storage server failover, safeguarding business continuity even during hardware failures. By leveraging standard Ethernet networks and NVMe/TCP, Lightbits reduces infrastructure costs while extending SSD lifespans with Intelligent Flash Management. With Lightbits, organizations achieve the perfect balance of performance, reliability, and cost-effectiveness, redefining what's possible in modern storage environments.

Lightbits Labs offers a best-of-breed, software-defined block storage solution that delivers exceptional performance and scalability for OpenStack environments, ensuring unmatched IOPS and ultra-low latency even under the heaviest workloads, while enabling seamless volume management, including effortless live migration and flexible scaling. With its disaggregated storage approach and software-defined architecture, Lightbits offers cost-effective, resilient, and high-performance storage, empowering businesses to scale independently and future-proof their OpenStack infrastructure.

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