

Top 5 Reasons Why Lightbits Labs for Kubernetes

Lightbits Labs™ offers a robust, software-defined block storage solution that integrates seamlessly with Kubernetes® environments. Here are the top five reasons to consider Lightbits for Kubernetes 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 PVC**

Kubernetes thrives on handling thousands of small PVCs simultaneously, making scalability essential. As new applications launch and customer demand surges, the volume of PVCs grows exponentially. Lightbits ensures unmatched IOPS and ultra-low latency, delivering industry-leading performance even in the most demanding environments. With Lightbits, your Kubernetes environment isn't just ready to scale—it's primed to excel.
- 3 Effortless Live Migration with KubeVirt**

The virtualization market is evolving rapidly, and migration has become a critical focus. With Lightbits and its integrated CSI driver, live migration with KubeVirt is seamless and powerful. The ability to effortlessly handle virtual machines with multiple PVCs is a real game-changer. Lightbits' robust CSI integration ensures smooth migrations, even in the most complex environments. With Lightbits, your virtual infrastructure isn't just ready for change—it's built to master it.
- 4 Seamless Multi-Tenancy and Encryption**

Lightbits empowers Kubernetes environments with robust multi-tenancy and encryption, all managed effortlessly by its integrated CSI driver. This isn't just a Lightbits feature—it's Kubernetes-native, placing full control in the hands of your Kubernetes team or customers. It eliminates the need to navigate complex storage principles, so your team can focus entirely on applications while maintaining optimal security and scalability. Lightbits ensures that Kubernetes teams have the tools to deliver performance, security, and simplicity—all in one powerful solution.
- 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® over TCP (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 unmatched performance, scalability, and resiliency for Kubernetes environments at scale, empowering businesses to thrive under any workload or demand. From seamless live migrations and robust multi-tenancy to cost-effective scaling and industry-leading IOPS, Lightbits redefines storage efficiency and agility for modern applications.