

# Lightbits for Azure VMware Solution (AVS) Minimize Your TCO for High-Performance Virtualized Workloads



#### PERFORMANCE AT SCALE

- Powered for virtualized Oracle, MySQL, MongoDB, PostgreSQL, and other latency-sensitive workloads
- Lowest latency available on AVS remains flat at < 500 µsec as load increases
- Up to 1 million IOPS per volume, scaling independent of provisioned capacity
- Fully integrated with AVS
- Only NVMe/TCP storage certified for VMware on Azure



#### **COST EFFICIENCY**

- Scale processing power and capacity independently
- Thin provisioning and compression to increase effective storage capacity
- Auto-scales capacity as data requirements increase



#### ENTERPRISE DATA SERVICES

- Synchronous replication within or across availability zones
- Multi-tenancy across multiple Azure environments
- Snapshots and database clones at no extra charge

Azure VMware Solution



For enterprises looking to migrate virtualized workloads to the cloud, Azure VMware Solution (AVS) provides a fully consistent VMware platform that allows them to 'lift-andshift' to Azure without time-consuming, expensive application refactoring. The challenge comes in migrating storage-intensive workloads, such as SQL or NoSQL databases, that require high throughput and low latency, a tall order in the cloud even without virtualization's extra layer of abstraction. If your only tactic for scaling up performance or capacity is to add AVS nodes that include compute or storage you don't need, you may find it hard to stay within your budget, especially as application demand surges.

With scalable high performance, consistent low latency, and predictable low costs, the Lightbits cloud data platform enables you to migrate storage-intensive applications to AVS with success. Built with large-scale deployments of mission-critical applications in mind, Lightbits unifies resources like a SAN so you can provision and manage storage efficiently, instead of selecting from a limited set of options with fixed compute-to-storage ratios.

## THE LOWEST LATENCY STORAGE AVAILABLE FOR AVS

Lightbits consistently delivers sub-millisecond latency, the lowest available for AVS, and up to 1 million IOPS per volume even under a heavy load. This performance makes it ideal for virtualized databases that support customer-facing applications that have unpredictable demand. You can be confident your users won't experience longer response times due to storage bottlenecks after you migrate applications to AVS.

## MULTI-ZONE HIGH AVAILABILITY BUILT-IN

Lightbits includes essential data services to improve availability and operational flexibility. Your data is protected from failures using synchronous 3-way replication within or across availability zones. All services are highly available and operational during AVS failures, upgrades, and maintenance. Your datastores can be re-mounted to any other AVS environment for disaster recovery, maintenance, or to migrate service to another availability zone or region.

## PREDICTABLE COST-EFFICIENCY

With Lightbits, you gain lower, more predictable AVS costs. Instead of over provisioning storage or compute on each ESXi server to allow for growth, you can scale storage dynamically and without the expense of deploying more servers. You pay only for the instances you deploy, not for provisioning more volumes, more IOPS, more throughput or taking more snapshots or clones. Built-in compression and thin provisioning stretch your capacity further to reduce costs even more.

## AZURE MANAGED APPLICATION FOR TURNKEY OPERATIONS

Certified by VMware for AVS and fully integrated with AVS, Lightbits is available through the Azure Marketplace as a managed service, making it as easy to provision and manage as Azure's native storage offerings. You choose the size of the virtual machines and the number of nodes in your cluster and you're ready to go.

As a fully managed service, Lightbits controls operations within your Azure subscription and manages the storage with self-healing, auto-scaling, replication, rolling upgrades, and other critical functions performed behind the scenes to ensure availability, performance, and data protection.

### ENTERPRISE DATA SERVICES INCLUDED

Built on a disaggregated, clustered architecture, Lightbits unifies resources so you can efficiently provision and manage storage like a SAN, with key enterprise data services included.

**Dynamic Scalability.** You can dynamically scale-out or shrink your Lightbits cluster on-demand to meet increased performance or capacity requirements.

Workload Migration. Fully integrated with VMware vSphere, you can use vMotion to move workloads between vSAN and Lightbits storage.

**Snapshots and Clones.** Lightbits provides built-in incremental snapshots to Azure Blob, eliminating the need for third party backup software, as well as efficient database clones for your DevOps teams.

**Multi-tenancy.** Lightbits is a multi-tenant solution. A single Lightbits cluster can serve multiple heterogeneous environments. Lightbits Quality of Service (QoS) ensures your users won't notice any service impacts.

**Flexible licensing.** Your Lightbits licenses are portable between AVS, Azure, and on-premises deployments and can be used for any implementation model: all cloud, hybrid- or multi-cloud.

#### Lightbits delivers scalable performance and low latency under a heavy application load.



#### Avg Read Latency Avg Write Latency IOPS

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