Data Sheet

Silk vs NetApp. Don't Settle for Slow Performance

When it comes to running your mission-critical applications and line-of-business databases in the cloud, it is imperative to provide the ultra-fast performance required to support fast transaction databases to deliver consistently high customer experience and satisfaction, even during the heaviest peak times. When it comes to choosing a platform to run on in the cloud, don't settle for merely good enough for an average day. See why Silk is the best option for supercharging your cloud databases to deliver the fastest BI and customer response time and really transform your business.

How Silk and NetApp Cloud Volumes ONTAP Differ

NetApp

- Uses a legacy single controller architecture with persistent SSDs carved into an aggregate, or a High Availability mode with two controllers with two disk aggregates set up in a synchronous mirror.
- Runs on a variety of different types of compute engines with different amounts of vCPUs and DRAM making read performance highly variable and inconsistent depending on the amount of memory available compared to the amount of IO being serviced. High write latency is a challenge due to inherent architectural limitations.
- Cannot scale past 2 nodes (with significant performance impact) and performance is strictly limited by the class of compute engine used for IO processing.

Silk

- Modern symmetric active-active architecture across entire cluster, serving parallelized IO from a single global pool of data spread across NVMe data nodes. Data is protected by fast write-mirroring, erasure coding, and triple parity. HA is always on with fully redundant data protection.
- Configurable number of identical high performance data nodes determines consistent amount of IO performance capability and capacity. Nodes are able to be scaled out or in automatically and non-disruptively to deliver the proper amount of performance on-demand while keeping costs in line.
- On demand, non-disruptively scalable architecture allows for up to 8 nodes active in a single data services domain, up to 1M IOPS and over 10GB/s of throughput at consistent sub 1ms latency. Multiple data pods are deployable from a single management console.

How Silk Does It Better

1. Faster Performance

Silk offers radically faster performance (vastly more IOPS and throughput at far lower latency) than NetApp so your databases won't suffer from long IO wait states. Whether you need faster and more consistent response time in your real-time database, or quicker BI results through accelerated analytics, Silk gives you as much performance as you need, on demand.

2. Greater Resiliency and Efficiency

Always-on data availability (we're talking 99.9999 available) served from a more resilient distributed data architecture. Combined with autonomous self-healing and replication, you can spend less time worrying about cloud outages.

3. True Hybrid Cloud

With databases on the Silk platform, you can minimize cloud vendor lock-in challenges and move your data between zones, regions, and even clouds easily as suits your needs best. Moving data from on-premises to the cloud (and back again) is as easy as lift and shift—but with full performance, features, functions, and usability—with no refactoring or modernization required. Take your time to modernize your applications properly and de-risk your move to the cloud by retaining all your existing requirements and user experience. Then you can keep, deprecate, or modernize your applications in a normal (limited risk) cycle.

With 3x More Data at 1/100th the Latency, Silk Is Up To 100x Faster Than NetApp!

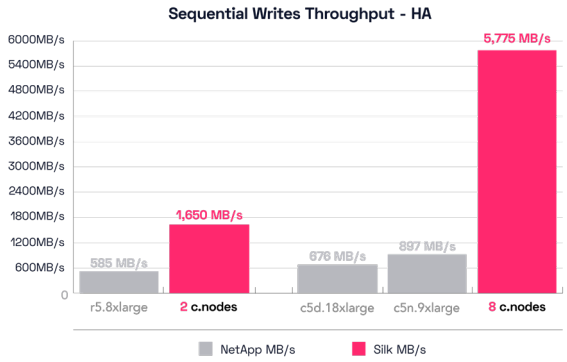

Figure 1: Comparing 64K Sequential Write Throughput results between Silk and NetApp's High Availability offerings based on the NetApp whitepaper "Performance Characterization of NetApp Volumes ONTAP For AWS".

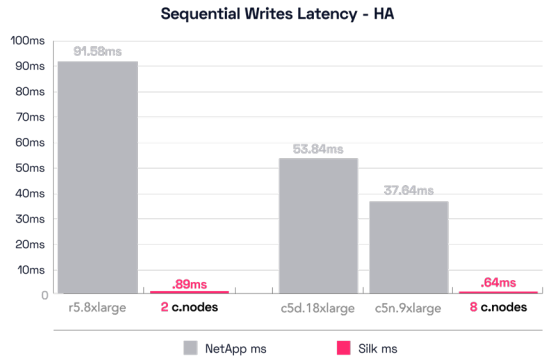

Figure 2: Comparing 64K Sequential Write Latency results between the Silk and NetApp High Availability offerings based on the NetApp whitepaper "Performance Characterization of NetApp Volumes ONTAP For AWS".

The Benefits of Silk

- **Smart and Adaptive** – Dynamic autonomous scalable performance makes it possible to flexibly adapt to changing business demands while controlling costs.
- **Data Efficiency** – With real-time inline data reduction, thin-provisioning, and zero-footprint clones, you get more performance for less cloud infrastructure. Silk can save you up to 30% on your current cloud data costs.
- **Simplified Data Management** – With full automation via commonly supported IAC, K8s, and RESTful APIs, your cloud is officially on cruise control.
- **Invisible and Non-Intrusive** – Because Silk optimizes data performance behind the scenes, it doesn't change or touch your data, applications, or services. Keep doing what you're doing… but a whole lot faster with greater efficiency and scalability than before!
- **Secured and Governed Completely by You** – No data is stored anywhere else except in your VPC/Project.

Silk is the database supercharger – the smart platform that delivers game-changing database performance without changing a thing about your underlying apps or database infrastructure. Whether you're running real-time transactional workloads or analytical workloads – your entire stack runs 10x (or more) faster with greater functionality. With always-on availability across regions, zones, and clouds, your databases keep going strong no matter what the cloud throws at you. Industry leaders like Priceline, Cisco, and Telefonica rely on Silk for unlimited cloud flexibility, unbreakable data resiliency, and the greatest database performance of their lives.