

Making Cloud Performance Predictable for Mission-Critical Applications



Solution Brief

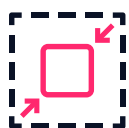
As organizations move mission-critical databases to the cloud, performance variability, operational risk, and performance-driven overprovisioning increase. Ensuring consistent application performance while controlling cost has become significantly more complex.

Enter Silk.

Silk is an adaptive, software-defined SAN that serves as the cloud acceleration layer between applications and cloud infrastructure—making cloud performance predictable for mission-critical workloads.

Silk delivers up to 10x faster performance and significant reductions in database licensing, compute, and storage costs by eliminating performance-driven overprovisioning. It deploys non-disruptively in IaaS or DBaaS environments and integrates with existing cloud investments without requiring application changes.

With Silk, cloud performance becomes predictable at scale, ensuring critical database workloads consistently meet performance targets, recover instantly, and support real-time data access without excess infrastructure.



Better-Than-Native Performance Without Overprovisioning

Silk delivers up to 10x higher performance than native cloud storage by decoupling performance from capacity. This enables continuous, algorithmic performance optimization without requiring excess compute or storage to meet peak demand.



Consistent Low Latency for Mixed Workloads

Silk dynamically adapts I/O behavior in real time, preventing performance volatility caused by mixed workloads and shared cloud infrastructure. The result is consistently low latency and predictable application behavior.



Efficiency Improves as Workloads Scale

As more workloads are consolidated, Silk increases efficiency and performance—allowing databases, analytics, and AI workloads to scale together on shared infrastructure without contention.

Operate Through Cloud Instability Without Disruption



Continuous Availability Without Manual Intervention

Silk continuously adapts to cloud maintenance events and infrastructure changes, avoiding disruptions and maintaining application availability without manual effort.



Instant Recovery and Data Mobility

Instant, zero-footprint snapshots enable rapid recovery, Dev/Test refreshes, and data mobility without performance impact or additional storage cost.



Proactive Visibility Across Environments

Native monitoring anticipates performance and stability issues before they affect applications, improving resilience, and reducing operational risk.

Enable Real-Time AI and Analytics on Production Data—Safely

AI and analytics require access to current, high-quality data. Delayed copies limit value, while direct access to production systems introduces security, performance, and operational risks.

Silk enables AI and analytics teams to work with live production data through instant, zero-footprint snapshots—offloading demand without impacting performance. Integrated data masking ensures sensitive information is protected before data leaves the production environment.

With Silk, organizations can safely leverage real-time data for AI, analytics, and inferencing while maintaining performance and control.

Optimize Cloud Costs Without Sacrificing Performance



Consolidate Workloads Efficiently

Silk's shared, multitenant datastore improves utilization as workloads scale—delivering economies of scale without introducing performance contention.



Eliminate Performance-Driven Overprovisioning

By delivering high performance over the compute network, Silk eliminates the need to oversize compute and storage resources simply to achieve acceptable application performance.



Instant Data Access Without Cost Multiplication

Provide instant access to current data across teams using zero-footprint snapshots—without creating fully provisioned copies or increasing cloud spend.

Give Every Team Instant Access to Current Data



Provide Current Data to Lower Environments in Minutes

Dev/Test, QA, and UAT teams gain access to up-to-date production data in minutes—not days—enabling faster development cycles and more reliable testing without impacting production systems.



Support AI, BI, and Analytics Without Performance Risk

Zero-footprint database views and snapshots offload AI and analytics demand from production systems while ensuring teams work with current data.



Ensure Data Is Used Safely Everywhere

Snapshots and replication integrate with leading data masking tools to automatically secure sensitive data for use across non-production environments.

Ready to get started? Visit silk.us to learn more.

About Silk

Silk is an adaptive, software-defined SAN that serves as the cloud acceleration layer for mission-critical workloads, making cloud performance predictable at scale. It delivers real-time data access, consistent application performance, and instant recovery - without performance-driven overprovisioning or application refactoring.

Trusted by enterprises across finance, healthcare, SaaS, and more, Silk accelerates databases, analytics, and AI workloads with built-in resiliency. By enabling independent scaling of performance and capacity, Silk helps organizations unlock the full value of their data.

For more information, visit <https://silk.us/>.