SILK

Solution Brief

The Silk Cloud DB Virtualization Platform

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Silk is a virtualization layer between your data and the underlying cloud infrastruture. The platform consists of the following components:

SILK VisionOS

VisionOS turns the underlying public cloud infrastructure into the world's most capable scale-out data virtualization and mobility platform.

SILK CLARITY

Clarity delivers predictive analytics through a comprehensive set of management and monitoring functionalities including application-level intelligence, machine learning, and big data predictive analytics.

SILK FLEX

Flex delivers an on-demand ability to compose, optimize, manage, and decommission resources as needed to support application SLAs.

Moving your most mission-critical data to the cloud can cause a lot of unnecessary headache. Not only can the process of migration be more difficult and time-consuming than expected but the performance you achieve in the cloud can leave much to be desired.

This solution brief provides a high-level overview of how Silk overcomes limitations of the public cloud that can drive up costs and increase business risk.

The Silk Cloud DB Virtualization Platform

The Silk Cloud DB Virtualization Platform is a virtualization layer that sits between your data and the underlying cloud infrastructure. With real-time data reduction, thin provisioning, and continuous resource optimization, Silk automatically matches your cloud data spend to your actual data needs at every moment, so you can spend less and cloud more.

Use Cases

Data Mobility:

According to Gartner, over 70% of workloads currently live on the public cloud. But the road to getting to the cloud hasn't been smooth: most applications require rigorous reengineering in order to move to the public cloud — while also delivering consistent SLAs and customer experience. However, the re-engineering process often takes much longer than expected and results in significant unplanned costs.

Silk provides the data services needed to easily move data around manually or through policy-based automation. With the ability to move applications and data sets to the cloud, organizations can significantly accelerate cloud migrations and reduce costs while also de-risking the business.

Mitigate Costs:

Organizations often see their public cloud costs grow at an exponential rate due to a growing data footprint. Capacity and performance are directly proportional in the public cloud: if you have a small data set that needs high performance, you need to over-provision and overpay to achieve the desired level of performance.

Another drawback of the public cloud is that it only supports one-to-one mapping of applications and the underlying data set. This means that duplicate data pools need to be created for each new application. Plus public cloud platforms lack data services such as deduplication and compression, leading to unnecessary resource utilization and the associated costs.

Since Silk disaggregates performance from capacity, you can scale out without overprovisioning. In addition, the platform delivers enterprise-class data services in the public cloud, enabling data reduction resulting in significant cost savings. Finally, Silk enables a many-to-one mapping of data to applications, eliminating the unnecessary cost of creating duplicate data sets. As a result of partnering with Silk, most customers are able to realize up to a 30% cost savings in their public cloud spend.

De-Risking the Business:

The most important factor organizations need to account for when moving from one cloud to another is to minimize business risk. As workloads move in an intercloud environment, one area that increases risk is the inability to deliver a consistent user experience and SLAs. This is due to the varying level of performance from the underlying cloud infrastructure.

Silk helps organizations reduce business risk by providing a platform which sits on top of the underlying cloud infrastructure. This enables Silk to deliver consistent industry-leading performance levels. In addition, the platform delivers infinite automation and policy-based scalability for both performance and capacity requirements. This ensures organizations are always able to deliver better than expected SLAs. Flex also delivers the agility needed to quickly configure new resources so new products and services can be built and tested faster.

Silk + Tier 1 Cloud vs Native Tier 1 Public Cloud

	Silk + Tier 1 Public Clouds	Native Tier 1 Public Clouds
Performance configurations	Consistent performance on all configurations	Depends on disk size and on # of vCPUs
Shared Data	Supported R/W volume mapping to multiple hosts for clustered Apps Spare capacity consolidation	Not supported (single host mapped to single data set)
Performance limitations	Unlimited Scalability for Performance: Input/Output Operations per second: 70K x N* - 110 K x N* Bandwidth – 1.9 GB/s x N* - 2.7 GB/s x N* *N - number of compute nodes	Input/Output Operations per second: 30k – 110K Bandwidth: 0.4 GB/s – 1.2 GB/s
Pricing	Average of 60% cost reduction	$0.17 per GB/Month

Silk offers enterprises the flexibility they need to move their data to match business needs, drive down the costs of managing applications, and mitigate business risks typically associated with the public cloud. For a more in-depth discussion, visit www.silk.us to speak to a representative or schedule a demonstration of
Silk's capabilities.

About Silk

The Silk Cloud DB Virtualization Platform gives demanding workloads 10x faster performance on the cloud compared to native cloud alone. The Silk Cloud Platform is a virtualization layer that sits between the underlying cloud infrastructure and customers' workloads. Without refactoring, workloads such as Oracle, Microsoft SQL Server, and industry-specific applications can move onto the GCP and Azure cloud and massively improve user experience. Industry leaders in e-commerce, software publishing, FinTech, and healthcare, trust Silk with their mission-critical workloads to get the ultra-fast speeds their customer's demand. Silk is headquartered in Needham, MA.

To learn more, visit silk.us.