Solution Brief

Silk and Insurance Workloads in the Cloud

Why Silk for Insurance

- **10x Faster Performance** and Sub-Millisecond Latency – Run your largest and most complex workloads at speeds that are on par or faster than on-prem.
- **Flexible Scalability** – Quickly scale up to meet high performance demands, than quickly scale back down when the task is over to keep costs in check.
- **Easier Disaster Recovery** – Quickly copy data without expanding your data footprint and easily lift and shift it to your DR site. And, in case you need to failover, quickly enable your DR into production.

Supercharge Your Performance in the Cloud with Silk

As an Insurance organization, adopting the cloud for your most mission-critical workloads is key to delivering consistently on your business goals - whether that's meeting your underwriting, claims or billing needs, risk modeling needs, or ensuring that you can quickly adapt to changing industry regulations. But whether you are just dipping your toe in the water or are already far along the path to a cloud-based operation, there can be several hurdles on the path to your success.

Silk is a software-defined cloud storage platform designed to enhance your cloud infrastructure by optimizing database workloads. It seamlessly integrates between your databases and cloud services, ensuring maximum performance without exceeding your budget.

Key Benefits for Insurance Operations:

- **Enhanced Efficiency:** Silk improves cloud operations, making them faster and more reliable.
- **Cost-Effective:** By optimizing resource usage, Silk helps manage and reduce cloud expenses.
- **Seamless Integration:** Silk works quietly in the background, requiring no significant changes to your existing setup.

This brief highlights how Silk can transform insurance operations in the cloud, delivering superior performance and cost savings.

Greater Insights and Decision-Making with Improved Database Performance

With millions of customers expecting seamless, real-time access to their insurance needs, lagging performance is not an option. In cloud-based operations, quick responses are essential for tasks like providing quotes, underwriting, issuing policies, or handling claims. But how does your cloud provider's performance measure up to your current on-premises setup?

In the public cloud, data performance can be unpredictable due to its shared, virtualized nature, with providers often setting throttles to limit data speed and flow. By not being able to achieve the high level of performance you've seen on-premises, your most mission-critical databases and applications can move at a snail's pace – making it appear to your end-users that you are experiencing difficulties, even when you're not. To bypass these throttles, you'll need to refactor applications for your chosen cloud vendor, which is time-consuming, costly, and risky.

Silk delivers cloud performance that matches or exceeds your on-premises workloads, with optimized access to additional cloud services. How? The Silk platform decouples performance from your cloud resources meaning you aren't limited by the throttling that your cloud vendor has placed on the speed of your data with native infrastructure solutions.

Identify Fraud Early and React Quickly

There are, on average, over 2000 application security vulnerability alerts each month in a typical enterprise operating in a cloud environment[1]. According to Forrester,[2] security vulnerabilities include the use of lost or stolen customer credentials, third-party attacks, and phishing - all of which could severely impact your customers and reputation. Security must be integrated into all development and deployment layers. Silk can accelerate fraud detection workloads and enhances enable easy data access to new monitoring algorithms to speed up fraud identification and support the ability to counter threats.

Artificial Intelligence (AI) for Security and Enhanced Experiences

Generative AI excels as an assistant for customer service, helping to understand current and future customer needs. By integrating AI into insurance workloads like underwriting, claims, and up-sell/cross-sell, carriers can enhance the customer and agent experience, uncover new business opportunities, and offer unique value-added services to existing customers. Silk offers the resource capabilities to integrate AI with Insurance workloads to provide this value to where native solutions may come up short.

Dynamically Scale Workloads (Up and Down)

Your databases and mission-critical applications require high performance that is often challenging to achieve in the cloud. Maintaining an exceptional user experience during unexpected demand peaks is crucial. These performance-intensive databases and latency-sensitive applications need more than standard cloud capabilities to handle high-volume periods, during special promotions, or month end demands, both internally and for your customers.

Large, complex core Insurance systems and modeling systems require large VMs to run in the cloud. However, the cost of running high quantity and larger VMs can quickly get out of control, especially when resources such as compute power, memory, IO and performance are bundled in cloud architecture. This often results in overprovisioning one resource to get enough of another. The Silk Platform breaks the link between these resources, allowing you to provision only the minimum required for your system. And Silk can automatically and non-disruptively scale up or out to add more resources as they are required. Now you are only paying for what you need, when you need it.

Database Licensing at a Reduced Cost

Data continues to grow at an exponential rate with third party data sources contributing to better insight but also the need for additional storage and quick access to actionable data. Insurance companies are often compelled to provision much larger VMs than are necessary from a compute perspective, just to get the data throughput performance they require from the attached resources. This has a significant effect on license requirements, and the associated costs. Silk's architecture overcomes performance limitations and throttles, allowing for fewer VMs with fewer vCPUs. So, you get the exact power and performance you need without paying for additional CPU, memory, and database licensing costs.

Implications for Disaster Recovery

Being available to your customers is a key business metric. If your database software is licensable by CPU core (e.g. Oracle Database, Microsoft SQL Server), the need to provision a large DR environment in the cloud can have a devastating effect on your budget. As discussed above, compute power is often tied to data performance, meaning customers typically must overprovision the number of vCPUs used by their database host VMs just to get the required IO necessary. With Silk, you get the ability to provision smaller compute instances while still meeting or exceeding your performance requirements in the cloud.

And when the time comes to failover to your cloud DR (Disaster Recovery) site, you may also be able to transfer your database licenses over from your previous production system, allowing you to scale up the compute resources without taking a hit from your database provider. If you are planning to replicate your database from production to your DR in the cloud at the infrastructure level, you need to be aware of the licensing implications. Depending on your replication technology, with Silk you can have either a minimal target database VM or none, minimizing your exposure to extra DB core licensing costs.

1 BitDefender "The next thinking regarding cloud-native application security", accessed 6 Dec, 2021
2 Forrester State of App Security 2021

Sentara Health Plan's Silk Story

Sentara Health Plan is the health insurance division of the not-for-profit integrated healthcare organization Sentara, serving Virginia and northeastern North Carolina. Its team decided that it was time to move its TriZetto QNXT workloads to Silk in the Microsoft Azure cloud, to optimize claim processing times, accelerate development and testing workflows, and optimize cloud costs.

With Silk, Sentara was able to achieve 6x faster data warehouse refreshes and cut UAT environment refresh times from days to minutes. And through over 2:1 data compression, the team was able to reduce its cloud resources, dramatically increasing cost efficiency even while scaling up the environment. Silk's enterprise data services, including its zero-footprint snapshots, made it possible for Sentara to take as many copies of data as needed, without going over budget. And with Silk's ability to simply lift and shift data into DR, Sentara was able to increase its savings even further.

Matt Douglas, Chief Architect at Sentara:

"The performance with Silk on Azure could not be met by any other cloud solution for our most intense workloads. Silk and Azure are a powerful combination for complex workloads on the cloud."

Ready to kickstart your own project in the cloud?

Visit https://silk.us/solutions/insurance/ to learn more about how Silk can help you move your insurance data into the cloud quickly while achieving the levels of performance you need without breaking your cloud budget.

About Silk

Silk enables organizations to migrate and run their most complex business-critical applications in the public cloud while continually optimizing performance, reliability, and costs. Silk's data services eliminate the need to copy production data for Dev/Test teams increasing their agility and enabling production data to be leveraged for Generative AI. Silk leverages over 20 technology patents so customers can effortlessly unlock the full potential of the public cloud in a fraction of the time. Silk is headquartered outside of Boston, MA.

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