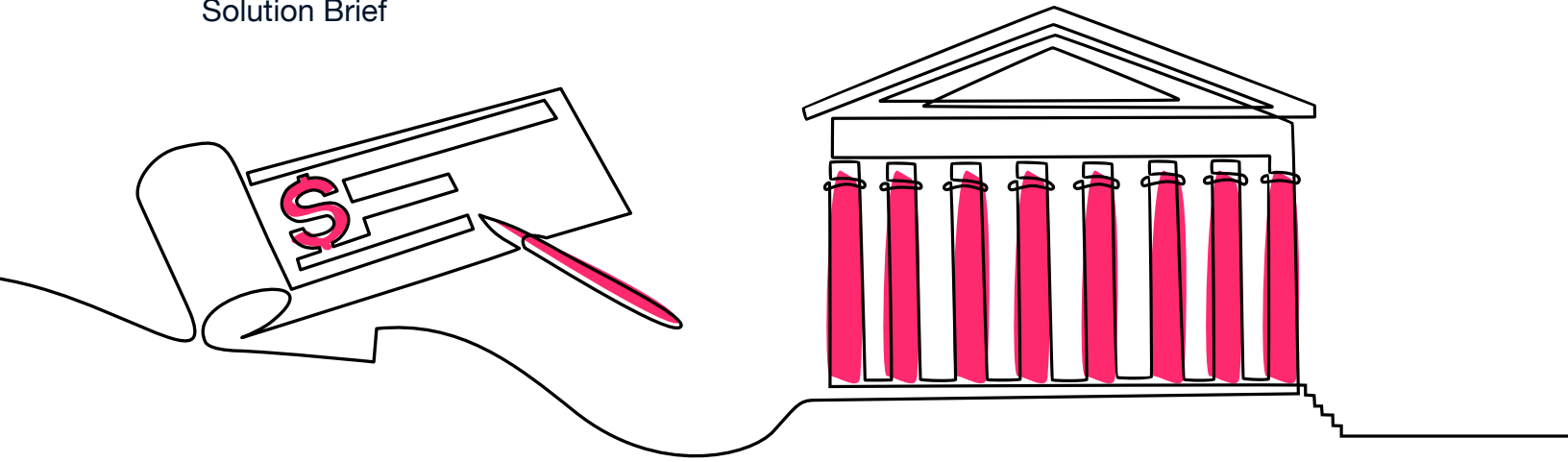




Solution Brief

Silk for Finance Workloads in the Cloud



Improve Your Performance in the Cloud with Silk

As a Financial Services organization, adopting the cloud for your most mission-critical workloads is key to delivering consistently on your business goals - whether that's meeting your customers' payment, investment or banking needs or ensuring that you are up to date on all 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 a number of hurdles on the path to your success.

Silk is virtual SAN in the cloud that sits between your database workloads and cloud infrastructure, quietly optimizing your cloud resources to give you the fastest performance possible at a price point that won't bust your cloud budget. In this Solution Brief, we will outline how Silk makes operations in the cloud easier, faster, and more cost-efficient.

The Fastest Database Performance Possible on the Cloud

With millions of customers expecting seamless and real-time access to their financial needs, you cannot afford performance that lags. With cloud-based operations, you need to ensure that you are able to quickly deliver on requests, whether for payment processing, investment trades or mortgage approvals. But how does the performance of your cloud provider compare to what you are currently achieving on-prem?

Since the public cloud is a shared, virtualized environment, data performance can be unpredictable, with providers setting "throttles" to place upper limits on the speed and flow of data available. By not being able to achieve the high level of performance you've seen on-prem, 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. In order to work around these throttles, you'll have to refactor applications for your cloud vendor of choice - a process that is time-consuming, expensive, and risky.

Silk offers the ability to get the same level of performance on the cloud that you've come to expect from your on-prem production workloads. How? Silk decouples performance from your cloud resources meaning you aren't limited by the throttles that your cloud vendor has placed on the speed of your data.

Keep Fraudsters at Bay

There are an average of 2,169 application security vulnerability alerts each month in a typical enterprise operating in a cloud environment¹. According to Forrester,² security vulnerabilities include the use of lost or stolen customer credentials, third-party attacks, and phishing - all situations which would have major negative consequences for your customers and your reputation. Security therefore needs to be integrated into all layers of development and deployment. Integrating Silk into your cloud software stack enables faster and more powerful security management, by increasing the speed with which threats are identified and countered.

Supercharging AI

For all its benefits, a cloud environment also opens the door for new kinds of attacks. Fortunately, the use of Artificial Intelligence (AI), as well as more traditional methodologies, provides enhanced security. Deep learning can be used to identify known issues, such as smurfing, while unsupervised learning can be used to detect more infrequent or anomalous events, such as credit card theft. Silk gives you the speed to head off the most sophisticated fraudsters 24/7 and to be fully compliant with anti-money laundering and related requirements.

Dynamically Scale Up and Down

Your databases and mission-critical applications need performance that is not easily achieved in the cloud. After all, you need to be able to keep your all-important user experience high during unexpected service demand peaks. These performance-hungry databases and latency-sensitive applications will need more than standard cloud “fluff” to support high volume windows, such as special promotions, or month-end demand internally and among your customers.

Large, complex systems require large VMs to run on the cloud. However, the cost of running more and larger VMs can quickly get out of control, especially because resources such as compute power, data capacity and performance are tied together in cloud architecture. Meaning it is often necessary to overprovision one resource in order to get enough of the other. Silk 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

Financial services 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 the performance limitations and throttles, allowing for the use of 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 have to overprovision the number of vCPUs used by their database host VMs just to get the required number of IOPS or the necessary level of throughput. With Silk, you get the ability to provision small compute instances while still meeting or exceeding your performance requirements in the cloud.

¹ BitDefender “The next thinking regarding cloud-native application security”, accessed 6 Dec, 2021

² Forrester State of App Security 2021

And when the time comes to failover to your cloud DR site, you may also be able to transfer your database licenses over from your no-longer-running 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 data from production to your DR in the cloud at the infrastructure level, you need to be aware of the licensing implications. Depending on your choice of replication technology, with Silk you can have either a minimal target database VM or none at all, minimizing your exposure to extra DB core licensing costs.

SimCorp

SimCorp is the global leader in investment management solutions. As it was looking to turn its SimCorp Dimensions product into a SaaS offering, it needed a way to get consistent, resilient, and high performance on Microsoft Azure. With Silk, one of SimCorp's largest clients was able to achieve 20% faster performance on the cloud compared to its previous on-prem set up of SimCorp Dimensions.

Ready to kickstart your own project in the cloud?

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

About Silk

Silk fuels innovation by enabling real-time access to production data in the cloud. Seamlessly integrating high-performance cloud storage into workflows, Silk empowers organizations to enhance innovation while maintaining performance, reliability, and control over trusted enterprise data. Silk's agile data delivery eliminates the need to copy production data, enhancing flexibility and enabling production data to be leveraged for generative AI.

Backed by over 20 technology patents, Silk helps customers unlock the full potential of the public cloud with speed and ease. Silk is headquartered outside of Boston, MA.

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