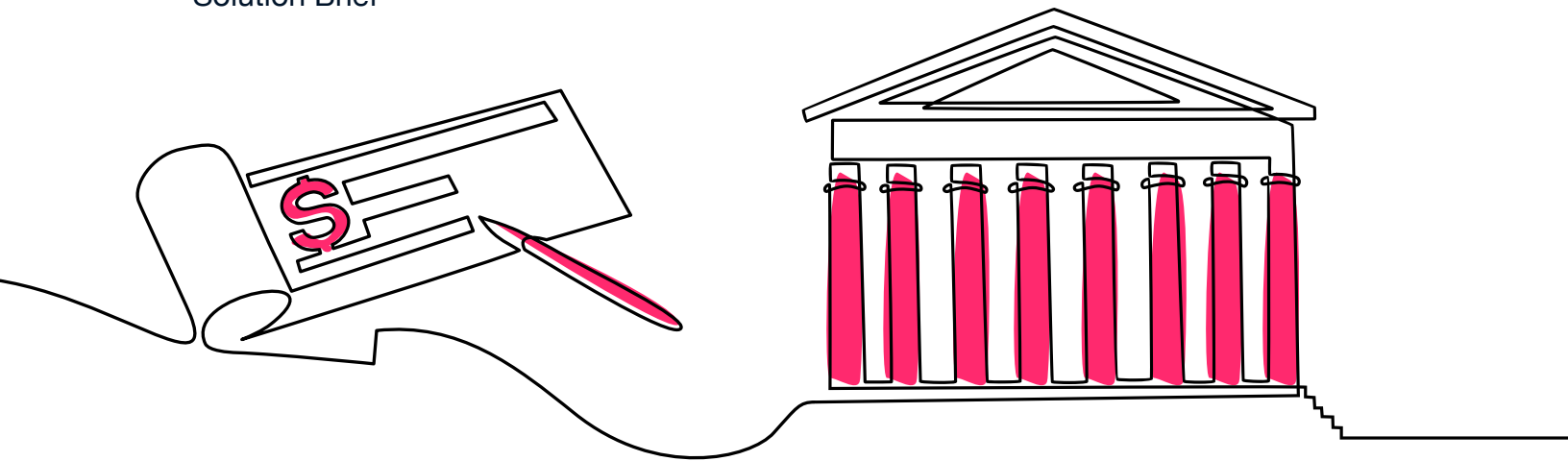




Solution Brief

# The Silk Platform For Finance Workloads in the Cloud



## Supercharge 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 a smart platform 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 the Silk Platform makes operations in the cloud easier, faster, and more cost-efficient.

### Supercharge Your Database Performance

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? The Silk Platform 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 environment<sup>1</sup>. According to Forrester,<sup>2</sup> 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. 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

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.

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

<sup>2</sup> 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.



### TPG

**TPG Software Inc.**, is an investment accounting software solutions provider that needed flexibility in their SaaS delivery model to add and remove resources to meet bimonthly periods of peak activity. Silk offered the agility that TPG needed. By decoupling the data from the infrastructure that it lives on, applications could quickly and easily be moved across the hybrid cloud, allowing TPG to avoid a massive, endless digital transformation. The result was a 30x cost savings from a Silk-enabled SaaS solution vs self deployment, and 20x faster reporting leading to customer satisfaction.



### eToro

**eToro** needed fast adoption of Microsoft Azure for their business-critical, performance-sensitive SQL Server database environment. Using Silk enabled the successful adoption of Azure, while providing the same levels of high performance eToro had come to expect on-prem. The result was a 50% shorter Azure adoption, hundreds of thousands of database transactions/sec, and sub-millisecond response time under heavy and unpredictable loads. With Silk's game-changing performance, eToro is confident that its customers will be able to continue making thousands of trades per second.

## 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 is the leading platform to quickly move mission-critical data to the cloud and to keep it operating at performance standards on par with even the fastest on-prem environments. Silk works with global enterprise companies and cloud providers to ensure a seamless, efficient, and smooth migration process, followed by unparalleled performance speeds for all data and applications in the cloud.

The platform makes cloud environments run 10x faster and the entire application stack is more resilient to any infrastructure hiccups or malfunctions. Silk has offices in Israel and is headquartered in Needham, MA. For more information, visit <https://silk.us/>.