Silk for Microsoft SQL Server on Google Cloud
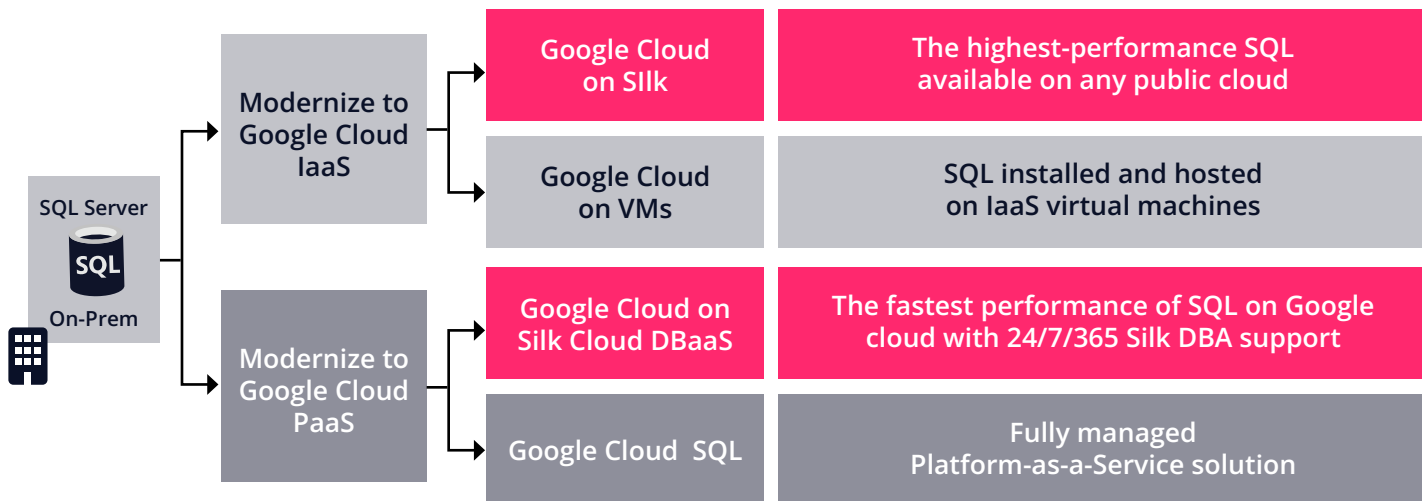
Solution Brief

Microsoft SQL Server is one of the most widely used databases for organizations' business-critical applications. Because of the sheer complexity and demanding IO needed, it is typically very difficult to migrate SQL Server workloads to the cloud. With the Silk Cloud Data Platform, however, it is now easier than ever to adopt the cloud for your most important SQL Server workloads. In this solution brief, we'll look at how Silk helps you quickly and easily move databases from on-prem to Google Cloud, while giving you ultra-fast performance and the peace of mind that you'll stay within budget and be able to handle future growth.

Fastest Performance on Google Cloud

Data-intensive workloads in SQL Server require high performance – over 2 GB/second throughput and 80K IOPS. Yet, this level of performance cannot be achieved natively on Google Cloud. Silk uniquely decouples performance from Google Cloud resources so consistent high performance is guaranteed. Furthermore, the platform allows you to deploy SQL Server on Google Cloud using any VM shape – without the need to resize. Silk provides sub-millisecond latency and the ability to dynamically scale performance up and down automatically as workloads change.

Minimized Costs on the Cloud

SQL Server costs can quickly get out of hand when migrated to Google Cloud. The culprits are the costs of the database licenses needed and hidden costs related to data inflation and supporting snapshots and clones for Dev/Test and analytic purposes. Silk allows you to optimize your performance, eliminating the need to overprovision on additional CPU, memory or database licensing costs. Silk offers rich enterprise data services – such as deduplication, compression, and thin-provisioning -- that help you minimize your cloud footprint. And with our zero-footprint snapshots, you can take as many copies of your database as needed with no additional costs.

SQL Server **On-Prem**	**Modernize to Google Cloud IaaS**	**Google Cloud on Silk** — The highest-performance SQL available on any public cloud
		Google Cloud on VMs — SQL installed and hosted on IaaS virtual machines
	Modernize to Google Cloud PaaS	**Google Cloud on Silk Cloud DBaaS** — The fastest performance of SQL on Google cloud with 24/7/365 Silk DBA support
		Google Cloud SQL — Fully managed Platform-as-a-Service solution

Maximum Data Durability

SQL Server workloads often support organizations' most business-critical applications. Any downtime from Google Cloud – whether for maintenance or unplanned outages – can have a serious impact on the business. Silk allows you to achieve greater uptime with a self-healing and active-active architecture, eliminating downtime with more efficient and effective High Availability and Disaster Recovery. And with machine-learning monitoring, Silk learns your usage pattern and actively avoids cloud provider maintenance windows.

Robust Data Management

Getting data into the hands of stakeholders who need it the most allows you to iterate faster and more confidently. Silk's Instant Extract feature allows you to use copies of SQL Server production data for Dev/Test and analytics quickly – with a minimal cloud footprint, latency, and cloud cost.

Silk Customers Using SQL Server on Google Cloud

Frasers Group's Story

Frasers Group, an online and high street retailer in the UK, was looking to improve agility and scale operations by moving to the cloud. Yet it was concerned about how to maintain licensing costs for SQL Server on the cloud while still getting the fast performance these workloads demand.

Silk enabled Frasers Group to achieve better value on their SQL Server licenses by rightsizing compute VMs and eliminating the need to overprovision. The faster database response time also allowed Frasers Group to give its customers a better experience and enabled the team to operate at scale.

Online Retailer's Story

A multibillion-dollar international furniture and home goods ecommerce company had a corporate objective to get all of its data out of on-premises datacenters by a strict deadline. The team had moved its 40 Microsoft SQL Server hosts to Google Cloud, but they kept hitting throughput limitations. With the deadline bearing down on them, the team knew they didn't have time to refactor their databases and were at a loss for what to do.

Silk offered the company significantly faster performance than their previous on-premises solution. In addition, Silk gave them 3.2 GB/s throughput per SQL host, with up to four SQL hosts living on each Silk Data Pod resource. Silk also helped the company make their cloud resources more efficient. Through Silk's data reduction services, the company achieved 3:1 data reduction.

Learn more about Silk for Microsoft SQL Server on Google Cloud by visiting silk.us.