SILK
One-Pager
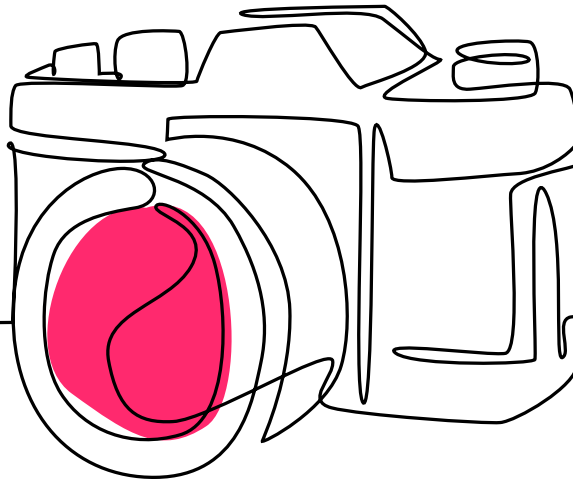
Zero-Footprint Snapshots on the Cloud with Silk

When adopting the cloud for your mission critical workloads – such as Oracle or MS SQL – there are some feature/function requirements around your current workflow operations that must have equivalents on the new cloud platform you are migrating to. One feature you might use regularly in your on-prem workflow is the ability to take instant snapshots of your databases across groups of disks (consistency groups). Snapshots provide you with the ability to quickly mount copies of databases at a certain point in time, iterate against them, and then tear them back down rapidly at almost no cost. Often used for Dev/Test or reporting purposes or even for Disaster Recovery, pointer-based snapshots have historically made it possible for you to quickly complete tasks that require a copy of data without going through the time-consuming process of fully cloning your entire dataset.

However, taking snapshots in the cloud can leave new cloud users with a nasty surprise as taking instantaneous, pointer-based snapshots is not a cloud native capability. Cloud native snapshots are separate full copies that take a much longer time to take and deploy, and they use up costly cloud resources each time they are taken – whether or not they are even mounted or used. Meaning if you take a lot of snapshots, you can expect a larger bill from your cloud provider. Though the real problem is the amount of time and complexity involved in trying to take a consistent snapshot, get it copied out, copied back in, and then mounted for use. This really puts cloud database users between a rock and a hard place: They often need to take numerous snapshots in order to complete important tasks… but the power and simplicity of their previous workflow does not translate over to the cloud, leaving them with the need to redesign their workflow to be a much slower and more expensive effort. This can really become a major problem for developers who need the agility the cloud provides, as well as the speed, power, and feature/function of rich data services they enjoyed on prem.

Zero-Footprint Snapshots with Silk

The Silk Cloud Platform provides enterprise class, consistent, zero-footprint, instantaneous snapshots to cloud database users. Silk is a virtualization layer that lives between your most mission-critical workloads and the underlying infrastructure. From here, it is also able to accelerate your cloud performance up to 10x faster than native cloud alone – making it ideal for large, complex workloads such as Oracle or MS SQL.

But the hidden jewel of Silk is its suite of robust enterprise data services. These services – such as inline deduplication, inline compression, thin provisioning, replication, and snapshots – work to help keep the number of cloud resources being used to a minimum and enable the same fast and efficient enterprise workflows businesses are used to having on prem.

In particular, Silk snapshots are of great value to cloud customers looking to create multiple copies of data. They are instantaneous and can be mounted as full R/W consistent copies in seconds, making them ideal for when you quickly need another instance of your data. They are pointer-based, which makes them able to run as fast as your primary copies do—there is no performance penalty whatsoever while taking, mounting, using, or tearing down the snapshots. Also, because they are pointer-based, they are zero footprint, meaning they don't use up any additional cloud resource footprint. In fact, through the use of Silk's enterprise data services, customers can see up to a 30% reduction to their cloud data bill compared to native cloud alone.

Sentara Health Uses Silk Snapshots to Keep Its Workloads Up and Running

Sentara Healthcare is a not-for-profit healthcare organization in Virginia and North Carolina. It offers services in 12 acute care hospitals, 10 nursing centers, and three assisted living facilities. Sentara had recently moved its SQL and electronic health record (EHR) workloads to Microsoft Azure. It was looking for a way to reduce the processing time that its SQL reporting engine in EHR was experiencing every night as it went through its ETL processes. On average, this maintenance process took 7-10 hours, and the database was unavailable to providers and patients during that time.

Thanks to Silk's built-in snapshot capability, the Sentara team is now able to take multiple snapshots of the database every night and mount those to other SQL Server hosts as the reporting environment went into ETL. This helped the team reduce their maintenance window from 7-10 hours per night to less than 15 minutes, giving end-users nearly 24/7 access to the data with full performance.

Ready to start getting more out of your current cloud resources?

Visit www.silk.us to learn more about what the Silk Cloud Platform can do for you!

About Silk

The Silk Cloud Platform 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/.