Case Study



SQREAM DB SERVES AS A SPEED LAYER FOR BID OPTIMIZATIONS

Company Overview

A leading omnichannel ad publishing and bidding platform develops and implements innovative online advertising software. Using automated systems, their software connects website, video and mobile app publishers with ad buyers. The company has several offices around the globe.

THE CHALLENGE

The platform's growing number of impressions - trillions per month - were becoming too difficult to analyze on a distributed Hadoop system. Most solutions investigated suffered from slow performance or complex operations, which caused unreliable query performance. Queries could take upward of five hours.

Existing infrastructure consisted of dozens of Hadoop nodes, with HBase leading to Apache Phoenix as the SQL frontend for HBase. Lengthy HBase scan times limited the effectiveness of the yield team, forcing them to reduce the analysis window to short time-frames, thereby reducing their relevance. The system was inadequate for ad-hoc querying or immediate response, and was unable to meet scalability requirements.

THE SOLUTION

SQream DB was deployed to unlock the massive insights hidden in the company's treasure trove of data. The system was chosen for the scale, speed and flexibility afforded by its market-leading GPU based design. After a one hour training session, the company's marketing team was up and running with SQream.

Using SQream DB as a speed layer, heavy analytical workloads are now offloaded from the distributed infrastructure. **SQream ingests 360 TB/day** and can query fresh and historical data simultaneously.

Queries are reduced from hours to minutes,

increasing analytics capabilities and enabling more users to run more queries. The marketing team gets deeper near-real-time insights, and subsequently delivers more targeted, customized ads.

Combining two 2U servers with a single NVIDIA Tesla card, SQream DB can handle 40TB of data per chassis and supports twelve concurrent users. SQream DB eliminated the need to expand the expensive Hadoop clusters, while enhancing their functionality. With a leaner IT operation, new analytics capabilities were delivered with tangible cost-savings.

CUSTOMER'S RESPONSE

We are monetizing our data and algorithms much better with the massive scalability and performance of SQream DB," said the customer's CTO. So impressive were the results that the company decided to upgrade the system with additional storage and GPUs to handle 500 TB of data.

SQream Technologies develops and markets SQream DB, a GPU data warehouse designed to enable unparalleled business intelligence from massive data stores. Global enterprises use SQream DB to analyze more data than ever before, while achieving improved performance, reduced footprint, significant cost savings and the ability to scale the amount of data they analyze to hundreds of terabytes and more.

To learn more, visit sqream.com or follow us on twitter @sqreamtech.

