



NVIDIA AND SQREAM GPU-ACCELERATED DATA WAREHOUSE

Enterprise data is growing at exponential rates, but the solutions for analyzing the data have remained largely the same. CPU-bound massively parallel processing (MPP) data warehouses that were once the bread and butter of every analysis pipeline now struggle to handle the sheer scale of data. Enterprises today expect under-a-minute reporting, instead of what can take half-an-hour on legacy systems.

Newer distributed solutions are often complicated to use and require expensive infrastructure, networking, and integration. It's time to change the way we handle massive data stores.

INTEGRATED SOLUTION

SQream DB combines the ease of use of legacy data warehouses and established SQL solutions with the speed and power of NVIDIA GPUs. Together, they have the advanced capability and power to handle massive data stores with trillions of rows and hundreds of terabytes at a fraction of the cost.

SQream DB provides lightning-fast analytics on immense datasets, particularly excelling with large, complex, multi-table join queries. Huge fact tables can be joined with ease, without the need for distributions, partitioning, indexing, and pre-aggregations. SQream DB's straightforward implementation allows any legacy MPP user to master the system within hours, delivering GPU-accelerated performance at much lower cost than MPPs.

INDUSTRY CHALLENGES

- > **Legacy infrastructure can't meet the needs of data engineers and scientists to gain insights from ever-growing data.**

Data scientists, who are key in many data-driven organizations, have demands that can't be met with the existing infrastructure. The existing systems weren't designed for massive data stores, ad-hoc queries, and the growing demands from high-value data scientists.

- > **The cost of maintaining and upgrading legacy data warehouses is unsustainable.**

MPPs have seen little improvement over the past decade, but distributed solutions and NoSQL simply can't compete with their ease of use. Companies spend millions of dollars on expensive, cumbersome MPP solutions that are easy to use but expensive to maintain and upgrade.

- > **Established data pipelines built on SQL make change infeasible.**

SQL is an extremely popular language, used by a large variety of tools, making it prohibitively expensive for organizations to move to tools that don't support native SQL.

Together, NVIDIA and SQream Deliver

EASY, COST-EFFECTIVE DATA PREPARATION AND EXPLORATION



Fast discovery and exploration of data through reduced query latency over large datasets allow you and your employees to be more productive and quickly achieve previously unattainable insights.

SQream DB is designed for the biggest, most intense SQL queries. The patented architecture detaches storage from NVIDIA GPU-accelerated compute. This lets you scale data sizes up or scale compute up and down without redesigning the entire system, matching the resources to your needs.

SQream DB is a columnar, massively parallel data warehouse, so it can handle incredibly complex SQL analytic queries, even when data size is in the petabytes.

SCALABILITY TO HUNDREDS OF TERABYTES



With the ability to analyze, on average, 20X more data than before, GPU-accelerated SQream DB enables better decisions, greater efficiencies, and higher profits.

SQream DB is used by companies with data sizes ranging from a handful of terabytes to its largest installation with petabytes of genome sequences.

Read more about [how SQream DB scales](#).

HIGH-DENSITY GPU COMPUTE FOR COMPLEX SQL ANALYTICS

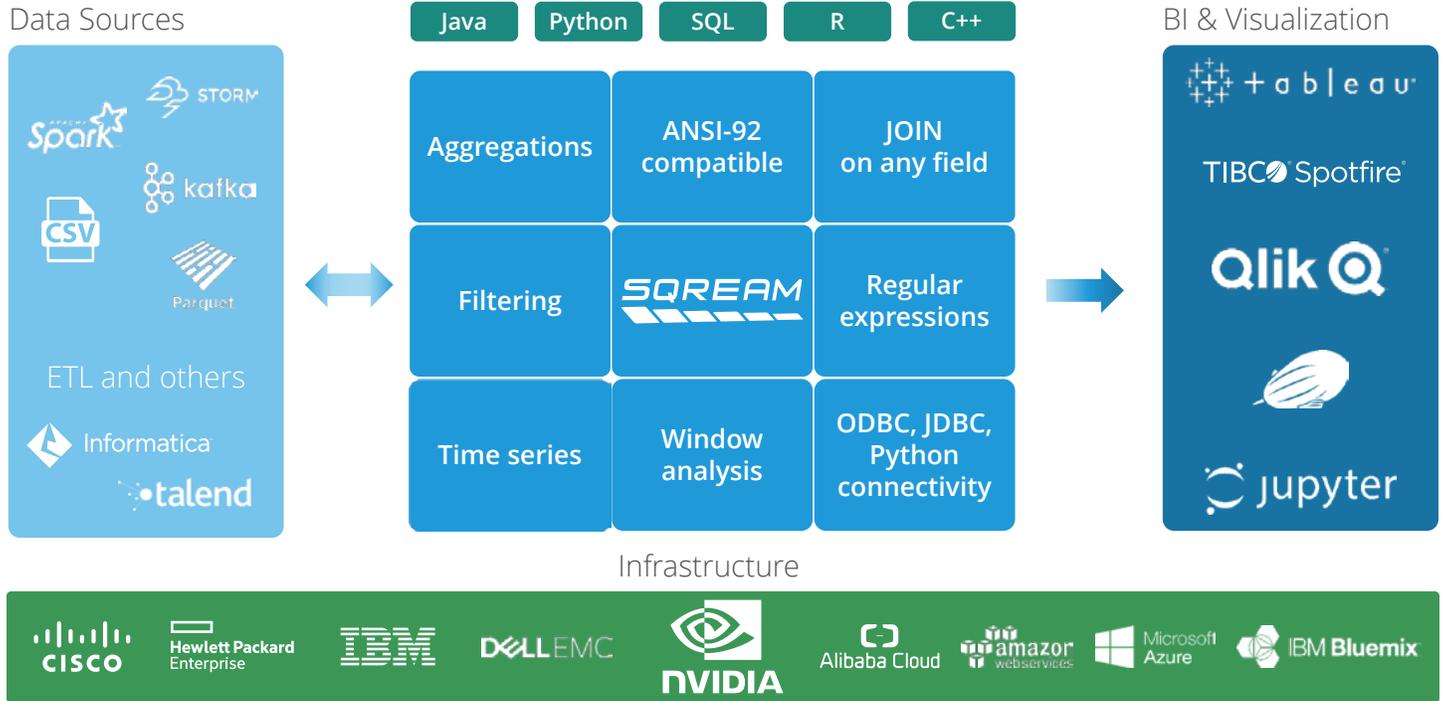


The high-density compute of NVIDIA GPUs allows SQream DB to support highly advanced ANSI SQL queries, making it a breeze to move complex analytic queries over from other databases. In visualization tools like Tableau, the change is as simple as selecting "Switch to New Data Source."

SQream DB's native SQL support also allow users to easily build their own visualizations by connecting open-source APIs with ODBC, JDBC, Python, PHP, and NodeJS connectors.

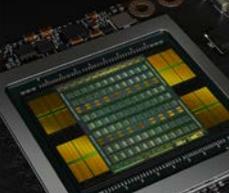
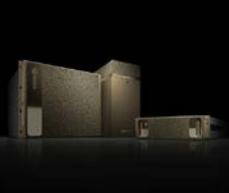
Read more about [Tableau and SQream DB](#).

SQream DB Marketecture



Recommended Infrastructure

NVIDIA data center GPUs are available in servers, supercomputers, and cloud platforms around the world. You can now get end-to-end accelerated analytics solutions powered by NVIDIA GPUs with integrated software technologies and support from NVIDIA experts.

<p>NVIDIA® TESLA® SERVERS IN EVERY SHAPE AND SIZE</p>		<p>NVIDIA DGX™ SYSTEMS AI SUPERCOMPUTERS FOR INSTANT PRODUCTIVITY</p>		<p>CLOUD EVERYWHERE</p>	
					

Industry Insights

Ad-Tech

SQream DB enables looking at weeks, instead of days, of ad impressions and running ad-hoc queries on trillions of ad impressions—resulting in improved accuracy and better monetization.

SQream DB performs up to 100X faster than Hadoop-based solutions like HBase-Phoenix combinations, reducing query times from hours to minutes.

See more: sqream.com/solutions/industries/marketing-ad-tech/

Telecommunications

Crucial insights are achieved faster and at significantly lower cost than MPP solutions and distributed file systems.

At one operator, for example, dropped calls were reduced by 90 percent.

See more: sqream.com/solutions/industries/telecoms/

Genome Research

Bioinformaticians need to store and analyze increasingly large genomic datasets faster and with better cost performance.

SQream DB can house petabytes of genomic datasets, turning a tedious two-month process into a two-hour query, with visualizations using common business intelligence (BI) tools like SpotFire.

See more: sqream.com/solutions/industries/genome/

Retail

SQream offers retailers a holistic view across all stores simultaneously, without lengthy data preparation.

Pricing and profit calculations are streamlined, improving scratch rates and detecting inventory anomalies.

See more: sqream.com/solutions/industries/retail/

Cross-Industry

SQream extracts meaningful insights and intelligence, often previously unattainable, faster and at significantly lower cost.

Learn More

NVIDIA GPUs for accelerated analytics help customers effectively analyze, visualize, and unleash the power of AI to transform their digital business into an AI enterprise.

Website: www.nvidia.com/analytics

Twitter: [@NVIDIAADC](https://twitter.com/NVIDIAADC)

Blog: blogs.nvidia.com/

SQream is a GPU-accelerated data warehouse built for massive datasets and complex SQL queries.

Website: sqream.com

Contact: sqream.com/about/contact-us or info@sqream.com

Twitter: [@SQreamTech](https://twitter.com/SQreamTech)

Blog: sqream.com/blog