memSQL (//)

# **MemSQL for Financial Services**

Delivering Real-Time Insights with MemSQL



5 of the Top 10 Banks Powered by MemSQL

**KURTOSYS** 







**SafeCharge** 

Financial services organizations are some of the world's most effective users of data and advanced data services, all used to fuel innovation, manage customers, and generate profits. Digital initiatives and new uses for data are creating massive value for banks. Access to real-time data gives banks, asset managers, analysts, and advisers a leg up.

The ongoing demand for digital transformation and data innovation are stressing legacy data architectures. The requirements of new customer experience programs, automation of risk analysis and decisioning, portfolio management, and operational efficiency are no longer being effectively served by legacy data infrastructure. As such, financial services institutions around the world are going through a massive effort to modernize their data infrastructure, to meet the increasing demands of today and the data-centric future.

MemSQL helps power data innovation for half of the top 10 financial services institutions in North America, and many more around the world. This access provides us with a unique perspective into the new requirements of, and struggles with, data infrastructure. This industry briefly leverages that knowledge to describe the common data infrastructure challenges faced by financial services organizations, and how MemSQL solves some of these business problems. We also share the technology advancements our customers are using to improve customer experiences, innovate in wealth management, optimize portfolios, manage risk, and deliver world-class operations that accelerate growth and create competitive advantage. Leading banks and trading firms leverage MemSQL to ingest, query, and serve data to thousands of simultaneous users.



Real-Time & Historical Analysis in a Single System



Unlimited Scale to Handle High-Volume, High-Velocity Data



Ultra-Fast Performance with High Concurrency



Transactional & Analytical Workloads in a Single System

### Portfolio Dashboards & Analytics

MemSQL delivers sub-second refresh of a dashboard with real-time data, including multiple tables and charts, even for large portfolios.

#### **Derivatives Trading**

Derivatives are used by traders to speculate on the future price movements of an underlying asset.

#### **Risk Analysis**

Increased regulations have caused major financial institutions to carefully study and track risk profiles for their trading departments and individual client portfolios.

- Low-Latency Queries: Interactive query response time through scale-out
- Scalable User Concurrency: Grow concurrency using industry-standard hardware
- Drop-in Compatibility: Broad tool support through standard SQL and APIs
- Fast SQL: Vectorized and compiled guery performance with sub-second response
- Scale-Out Architecture: Deliver performance as user concurrency grows
- Stream Ingestion: Discover insights on fast-changing data with real-time ingestion
- Real-Time Ingest & Queries: SQL ensures latest events are calculated
- MySQL Wire Protocol: Interoperate with existing apps and platforms
- Single Integrated Platform: Simultaneous transactions and analytics



#### **Real-Time Fraud Protection**

In this era of global finance, vigilance against fraud is more important than ever. Our customers use MemSQL to build anti-fraud applications with fast distributed parallel SQL query capabilities and spatial data management.

- Real-Time Threat Detection: Query live data to identify threats
- Fast SQL: Parallel query processing with sub-second response times
- Scalable Analytics: Fraud prevention logic using standard SQL to reduce dev times

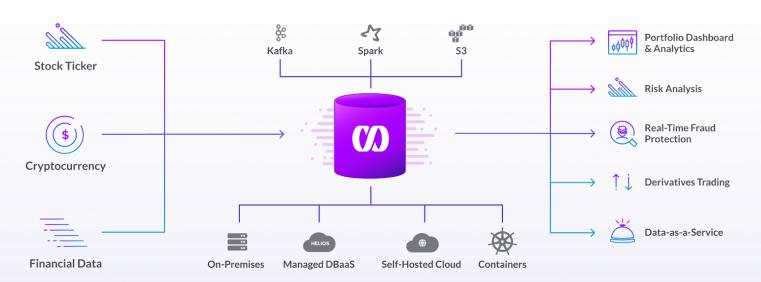
#### Data-as-a-Service

MemSQL powers Data as a service (DaaS) platforms, a data management strategy that uses the cloud to deliver data storage, integration, processing, and/or analytics services.

- Real-Time Insights: Ability to turn real-time data into actionable insights
- **Low Latency Analytics:** Sub-second query response time for complex analytics
- Performance at Scale: Deliver reliable performance as you scale-out

## **Fastest Event-to-Insight Performance**

Deliver against the toughest service level agreements using distributed, lock-free ingestion and real-time query processing



US TOP 10 WEALTH MANAGEMENT SERVICE

MemSQL powers wealth management dashboards for a Top 10 US Financial Institution - one of the most demanding financial services applications. MemSQL's scalability and support for fast, SQL-based analytics, with high concurrency, mean that it's well-suited to serve as the database behind these highly interactive tools.

Read Case Study >

GLOBAL INVESTMENT **BANKING FIRM**  MemSQL enables a top global investment banking firm to track risk measures for their portfolios, trading departments, funds they offer, and individual client portfolios, in real time. Customer-built MemSQL solutions track portfolio risk using high-speed joins of position risk, index and fund composition, and risk factors.

MAJOR **US BANK**  MemSQL enables top banking firms in the US to be very well suited to support risk management and decisioning applications and analytics, as well as related areas, such as fraud detection and wealth management. MemSQL powers the data platform for credit card fraud detection "on the swipe" for a major US Bank.

Read Case Study >



