



Summary

CUSTOMER

Leading Global Investment Bank

CHALLENGE

To keep ahead of growth, the bank continually seeks to improve the scalability and cost effectiveness of their order management application.

OUTCOME

After recent review and testing of competitive high performance technologies the bank recommitted to using InterSystems technology. The InterSystems IRIS™ data platform was of particular interest due to its massive horizontal scaling for concurrent transactional-analytic processing, with a modest system architecture.

Global Investment Bank + InterSystems

Leading Investment Bank Chooses InterSystems IRIS to Future-Proof its Equity Trading Platform

InterSystems Software Provides Ultra-Reliable, Real-Time Processing at Scale

InterSystems Multi-workload Transactional-Analytic Database Chosen for Critical Application

One of the world's largest investment banks – which processes a significant portion of the entire world's equity trades every day – migrated their main equity trade management application to InterSystems data platform technology.

The organization has 50,000 employees and more than \$1 trillion in assets under management. Their next-generation order management platform was created to meet global equities markets' demand for high-throughput and low-latency electronic trading. One of the largest applications at the firm, it now also handles cross-asset trading – managing as many as billions of transactions per day, including order management, routing, trade capture, booking, reporting, and execution.

The system is in high demand, with hundreds of trading applications as clients, plus thousands of users who need access to the transactional information in real time. Prior to migrating to InterSystems data platform, the legacy implementation had a data contention problem: when all the client applications were querying and searching its in-memory database, both the application's insert/



BENEFITS:

- **3-5x throughput increase**
- **10x performance improvement**
- **75% reduction in operating costs**
- **Zero performance or reliability issues**

update performance and the client query performance would suffer degradation. A cost-effective solution was also needed to enable the bank to stay ahead of the growth trends in market volatility, speed, capacity, and resiliency.

“InterSystems technology gave us extremely high data ingestion rates while simultaneously proving lightning-fast response to queries from hundreds of client applications that use trading data,” says the Director of Order Management at the bank. “Overall, throughput increased by three to five times. Performance increased, and we were able to reduce our operating costs by 75 percent.”

For 10 years, the InterSystems-based order management system has been known for its high ingestion, stability, and continuous reliability – even during periods of high volatility and trade volume.

But time marches on, markets expand, and the investment bank constantly evaluates technology that will help them keep ahead of their expected growth and provide the lowest total cost of ownership. In 2018, they took another look at various database technologies, including the new InterSystems IRIS data platform.

“Besides InterSystems, we were looking at offerings from companies that provide scale-out SQL with high performance, the Director of Order Management recalls, “and we chose InterSystems again.”

InterSystems IRIS Provides Cost-Effective Performance and Scalability

With InterSystems IRIS, the bank is streamlining their architecture, continuing to improve performance, consolidating separate reporting databases, all while reducing costs even further.

“That’s just one example of why InterSystems has been our technology partner through the years,” says the Director of Order Management. “We chose to stay with InterSystems due to the longstanding relationship and trust we’ve built over the years, the support, and the speed and reliability of the technology. It’s absolutely mission-critical that the system be durable, fast, and reliable. Our requirements for performance, scalability, and reliability are among the most stringent in the world. We are confident we have chosen the right database technology.”