## Summary

**CUSTOMER**

Fortune 100
Investment Bank

**CHALLENGE**

The development
manager at a top global
investment bank needed
to find a solution to meet
the following demands
of his organization's
business.

**OUTCOME**

The client deployed
InterSystems data
platform to address both
the business and technical
challenges.

Fortune 100 Investment Bank + InterSystems

# InterSystems Data Platform in a Fortune 100 Investment Bank

- The customer management application must support the ability to answer ad-hoc queries about an end customer's assets

- The same system must support the ability to report traceability to show that trades were in compliance

- The customer management application must scale dynamically and respond to queries in milliseconds, not seconds

- The underlying database must be able to handle big data volumes (TBs) of trade data from across the firm

- The underlying system must scale with increasing demands of velocity, variety, and volume of data

- The system must reduce infrastructure costs

## Technical Challenge

The firm's data was archived into a Hadoop data lake. The architecture had the following limitations:

- The data lake was good for basic historical analysis but could not support real-time, current data streams

- Performance was barely acceptable and had limitations on scaling out

- The application could not provide data drill down for analysis reporting (Hive only supported simple SQL queries, no joins)

- The application could not support more advanced, analytical needs

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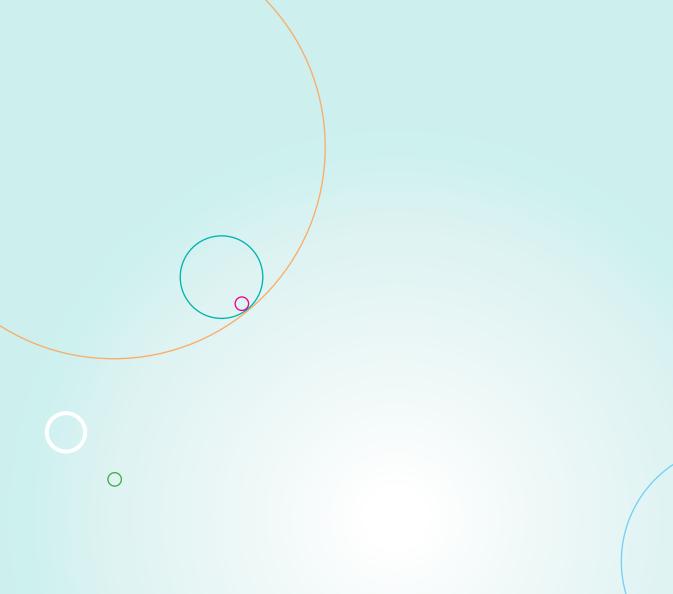Health | Business | Government

## InterSystems Data Platform

- HDFS was integrated with the data platform to combine terabytes of historical data with current transactions

- The data platform's persistent store and cached data layer was architected to support the needs of different lines of business. A single deployed reference architecture supported ad-hoc user defined queries with high performance

- InterSystems data platform supports complex SQL queries across all applications while meeting SLAs

- InterSystems data platform for financial services uniquely combines shared-nothing and shared- everything architectures. It proved to be the only option in the market that could provide the required performance at scale

- The reduced costs requirement was met because InterSystems data platform's 'cloud-friendly architecture' does not require specialized hardware. The application could be configured to run (and scale) on commodity hardware

## InterSystems Data Platform Capabilities and Benefits

| Capability | Benefit |
| --- | --- |
| Multi-model support | Supports all data types in a single data platform. Provides low cost of ownership by eliminating the need for point solutions to support multiple data models. |
| Full ANSI SQL support | No need to rewrite queries when porting from legacy applications |
| Only technology to address inner, outer, cross joins across all data types with shared everything | Supports both simple and complex analytics using standard SQL. |
| Data is always up to date and accurate without the need to duplicate or broadcast data | Saves on server memory and storage footprint while minimizing network traffic. |
| Consistent performance | Performance is consistently maintained regardless of what data is queried or what data is already cached in memory. |
| Multi-workload | Future-proofs investments. The data platform can support future business requirements. |
| Dynamically scales both vertically and horizontally | Eliminates the need for expensive hardware investments when required to scale vertically and/or horizontally. |
| Government grade security, Common Criteria 3 certified | Low risk. Secure operations. |
| Simple to install and support | Fast implementation means quick time-to-market. |

Contact us to learn more about InterSystems data platform or to schedule a demonstration. **Financial.InterSystems.com**

The power behind what matters.

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