



IEX Cloud Improves Financial Data Distribution Speed 15x with SingleStore DB

1.2+

BILLION

API Requests
Processed Daily

125k

USERS

In Over 120 Countries
After Only 2 Years

“ We need to be able to standardize all of our data to make it efficient and to make it accessible to people that don't have a large amount of money. In my opinion, SingleStore solved for all those use cases. ”

Josh Blackburn,
Head of Technology

Business Goals

The Financial Services industry has long been among the fastest adopters of new technologies, dating back to the launch of the first transatlantic cable in 1866 that used technologies like telegraph and Morse code. Fast forward to today, and new startups within financial technology are now disaggregating the functions and services from larger banking and finance players.

IEX Cloud, an IEX Group company, has a vision to create a vibrant financial data ecosystem that delivers best-in-class financial data to this underserved market. The platform does more than just financial data delivery. It represents an entirely new business model for financial data that meets individuals' and businesses' needs across the board. IEX Cloud's priorities are to:

- Break down the barriers to financial data and constantly reinvent to better serve the entire ecosystem.
- Challenge the status quo in the financial data industry by delivering high-quality data to their community that is easy to use and available at a reasonable price.
- Provide a robust set of capabilities to help developers build efficiently and iterate quickly.

Technology Requirements

IEX Cloud needed database technology that's as innovative as it is to support its corporate mission of building a data platform to make financial data more accessible. The platform started on MySQL, but outgrew it quickly. The technical requirements for an upgraded database had to account for many modern use cases from large analytical queries to latency-sensitive requests in the same API.

To perform to IEX Cloud's expectations, the database must horizontally scale reads and writes to handle API demand increases at any time and volatile financial markets. Fast, scalable reads, writes, and analytics are essential for keeping up with real-time financial data.

The data needed immediate availability, and storage in one system to reduce complexity and ensure low latency access. Standardization into one format, with one API signature, greatly simplifies the process of developer integration. Support for fast Extract, Transform, Load (ETL) operations that scale from hundreds to thousands of daily historical datasets is another key component of the system.

Why SingleStore? High-Performance Built for Rapid Growth

IEX Cloud evaluated many databases and found that only SingleStore DB met all of its requirements. This self-managed cloud-native unified database is built for speed, scale, and agility. It offers ultra-fast ingest, super-low latency, high concurrency, elastic scale, and the ability to work with any data, anywhere.

SingleStore DB can store historical and real-time data in the same store and runs on commodity hardware. IEX Cloud chose to deploy it on Google Cloud Services (GCS), harnessing the network's speed and cost-efficiency.

It was easy for IEX Cloud to get started with SingleStore DB, as the database supports the SQL Wire protocol. Its scaling capacity can handle petabytes of data, the ingestion of millions of events per second, and the simultaneous analysis of billions of rows of data in relational SQL, JSON, geospatial, and full-text search formats, making it an ideal choice for complex financial data workloads.

Business Outcomes

10x-15x Speed Improvement

IEX Cloud's ETL process execution time dropped from days to minutes, and the API's average response time is 8ms. SingleStore DB's automation, innovative features, and high performance deliver substantial time-savings to IEX Cloud's lean team, freeing up their resources for other essential tasks.

Standardized Data in 1 Place and 1 API

IEX Cloud can store real-time and historical data in the same place with SingleStore DB, which streamlines the process of making it available to the platform's customers. These data sets are standardized into 1 format and 1 API, greatly reducing the complexity of working with them.

Developers Can Build and Scale Financial Applications Faster

Developers get the financial data they need when and where they want it, at an affordable price. The core and premium data sets support a variety of use cases, such as Fintech startups bringing their ideas to life, front-office traders needing real-time data, back-office operations and reconciliation, and Investor Relations teams staying up-to-date on their company and competitors.

Continued Enhancement and Expansion of Accessible Financial Data Sets

IEX Cloud now has 200+ financial data sets and plans on adding new data monthly. Data creators can easily share their sets at no-cost and get paid when developers use their data. The quality, coverage, and timeliness of IEX Cloud's data continue to improve and provide a powerful foundation for innovations in the financial market.