



CASE STUDY

Deutsche Börse Achieves an Intelligent Cache with Redis Enterprise

Executive Summary

As an international exchange organisation and innovative market infrastructure provider, Deutsche Börse Group offers its customers a wide range of products, services and technologies covering the entire value chain of financial markets. With around 6,000 employees, the company has its headquarters in the financial centre of Frankfurt/Rhine-Main, as well as a strong global presence in Europe, Asia and the United States. In order to offer its customers a reporting solution, Deutsche Börse relies on rapid data reporting and processing. Deutsche Börse turned to Redis Enterprise as an intelligent cache to rapidly process and organize data in order to fulfill this new requirement. As a result, Redis Enterprise has enabled Deutsche Börse to scale with anticipated quote and trade data volume growth.



High Throughput and Minimal Latency

Deutsche Börse initially adopted Redis Enterprise in January 2018, during a previous collaboration with a vertically focused system integration partner. At that time, Deutsche Börse and its system integrator required Redis Enterprise's ability to process data in real time and ensure high throughput and minimal latency, and that's precisely what Redis Enterprise guaranteed.

Initially chosen by the system integrator, Redis Enterprise was the natural fit to accommodate Deutsche Börse's needs. After the system integrator contacted Deutsche Börse, the integrator started to build a publication solution with Redis Open Source as the caching layer, while Deutsche Börse contributed a vital piece of stack infrastructure.

"Redis Enterprise supports the throughput and latency requirements Deutsche Börse is required to guarantee to its regulator and the customers."

Maja Schwob

HEAD OF DATA IT
DEUTSCHE BÖRSE

An Advantageous Caching Solution

Deutsche Börse currently uses Redis Enterprise as an intelligent cache to power a data warehouse that is then used for regulatory compliance purposes. For example, Deutsche Börse's data workflow entails every quote and trade which is subject to compliance requirements being captured into Kafka, which subsequently collates the data sources and passes them over to Redis. Redis then cleans, aggregates and processes the data, which is stored in an Oracle DWH until it is ready to be deployed in order to generate the required regulatory reporting data.

With its diverse set of data structures and its capacity as a fast data ingest solution, Redis Enterprise has optimized Deutsche Börse's application framework. Redis Enterprise guarantees seamless scaling, always-on availability and automated deployment — all of which are critical in the financial industry.

Deutsche Börse's Requirements

- **High throughput.** To ensure the timely publication of data, Deutsche Börse required an intelligent cache that could process data in real time.
- **Thorough support.** In order for Deutsche Börse to build an effective workflow, a responsive customer support network was obligatory to troubleshoot any issues.

Redis Enterprise Benefits

- **Scalability.** Redis Enterprise allows its users to benefit from seamless scalability, so Deutsche Börse was able to keep up with its quickly growing dataset.
- **High availability.** Redis Enterprise has enabled Deutsche Börse to maintain rapid data transmission speeds.
- **Reliable infrastructure.** Thanks to Redis Enterprise's high performance and scalability, Deutsche Börse has achieved an advanced caching solution.

