datAvail
BI/Analytics • Applications • Databases

Case Study

On the Road to Hypergrowth: How a FinTech Leader Leveraged Datavail's Amazon Aurora MySQL Expertise to Prepare for 10X Data Growth

Challenges and Business Goals

A leading trading technology FinTech company turned to Datavail to resolve critical performance issues and prepare for major growth.

With decades of experience providing trading platforms, APIs, and seamless integration, this innovative organization empowers financial services firms to enter new markets, create services, and streamline workflows.

However, its multi-tenant Amazon Aurora MySQL database struggled to keep pace as the company rapidly expanded. Queries ran slowly, leading to complaints about lagging performance from users.

The company needed to quickly diagnose and resolve these issues before they further impacted customers. It also wanted to ready its database infrastructure for 5-10X data volume growth predicted in the coming years.

Technologies Covered

MySQL
Amazon Relational Database Service for MySQL

Amazon Aurora
Amazon Aurora Serverless V2 MySQL 8.0.23 Compatible

Solution

Datavail performed a comprehensive assessment of the production Amazon Aurora MySQL cluster to identify performance bottlenecks and the root causes behind them. The team made several recommendations following the database health check, which included:
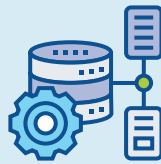
- Adjusting the database capacity planning to accommodate 5-10X data growth.
- Improving vertical and horizontal MySQL scalability through additional reader nodes and RDS Proxy Read optimization.
- Optimizing the MySQL configuration and tuning the cluster's performance.
- Proactively assessing and maintaining the database cluster.
- Implementing database monitoring.

Following the Amazon Aurora assessment, Datavail began the remediation process so that the customer's users were no longer impacted by performance and scalability problems.
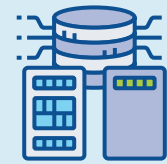
Results

10X data growth readiness through increased database capacity.

50% more maximum capacity for the Aurora Serverless instance.

90% less storage needed after defragmenting large tables.

Improved cost-efficiency of the database cluster.

Fast resolution of critical performance issues.

With Datavail's MySQL and AWS expertise, the customer can now scale confidently while delivering innovative fintech solutions to its users.