

Acquia will migrate 140,000 MySQL databases to Amazon Aurora to improve performance of its Digital Experience Platform

Case Study



Executive Summary

Acquia will migrate the MySQL databases that power its Open Digital Experience Platform to Amazon Aurora to improve workload performance, reduce downtime, and free engineers from undifferentiated database management activities. Until now, the company has overprovisioned databases to meet their 99.95% uptime SLA.

“With Amazon Aurora, we’re moving up the stack to focus on delivering more value to our customers and not the virtual machines we’re managing.”

— Ed Brennan
Chief Architect for Acquia

The Challenge

Acquia currently deploys high availability (HA) clusters of database servers, which results in unnecessary expense for dormant capacity. With Amazon Aurora, Acquia receives the same service for customers at an optimized cost point. Instead of doing high-value activities like improving products, launching new services, or supporting customers, Acquia teams are scaling and updating database servers to meet performance requirements and deliver their 99.95% uptime SLA.

The Solution

Acquia will migrate all the MySQL databases they currently run in an IaaS (infrastructure-as-a-service) environment to Amazon Aurora to take advantage of fully managed services on a serverless architecture. The move will improve how Acquia delivers solutions on its Open Digital Experience Platform to its customers and transform the way its engineers spend their time. Running on Amazon Aurora will allow Acquia to reduce provisioning costs and downtime, improve workload performance, and add new capabilities and services down the road as they become available on Amazon Aurora.

About Acquia

Acquia was started by the founder of Drupal, Dries Buytaert, as a hosting company for Drupal websites. Since then, it has grown to become a comprehensive, white glove service and solutions company that allows organizations to easily build, manage, and optimize their digital experiences all on one platform.

Using the Open Digital Experience Platform, Acquia businesses can move beyond basic hosting to a platform that empowers them to deliver personalized content across all channels through their customer's journey. Acquia offers cutting-edge tools like website marketing services and content distribution systems that organizations can use to improve their customers' engagement from start to finish.

Results and Benefits

Moving from an IaaS to the fully managed PaaS (platform-as-a-service) environment on Amazon Aurora, will transform Acquia's ability to serve their customers and help them stay competitive.

"Moving up the stack" with fully managed services

It's not easy to maintain 140,000 MySQL databases for customers with 30,000 sites that receive millions of page views hourly, especially when each customer runs their own custom code and configuration. The engineering and operations teams at Acquia spend a large percentage of their time overseeing and managing servers and the IaaS environment. By moving to the fully managed services provided by Amazon Aurora, "we're moving up the stack with our clients," says Ed. "Now, our teams will be free to focus on ways to deliver more value to customers."

Improving performance and reducing downtime

Since every customer runs their website differently, it would be misleading to try to estimate general performance gains across all the servers. However, thanks to the serverless architecture of Amazon Aurora, "we will be able to seamlessly scale processing and the underlying storage that goes with it, which gives us the opportunity to be more performantly available for our clients," explains Ed. "With this service, we also expect to see reductions in downtime."

Right-sizing the environment without compromising uptime SLA

In order to provide access to additional servers for the purpose of HA or to enable multiple environments, Acquia must pay for those servers today even if they are inactive. On Amazon Aurora, Acquia will only have to pay for what is used, such as when the second node for HA is engaged, or a new development environment is spun up by the customer.

"We provide a 99.95% uptime SLA, which until now has meant we needed to over provision our environment to allow for changes in demand. Amazon Aurora will ensure the SLA for us and allow us to right size our environment and our costs. **"**

— Ed Brennan
Chief Architect for Acquia

Learn more

[Amazon Aurora](#) is a MySQL and PostgreSQL-compatible relational database built for the cloud, that combines the performance and availability of traditional enterprise databases with the simplicity and cost-effectiveness of open source databases. Amazon Aurora is up to five times faster than standard MySQL databases and three times faster than standard PostgreSQL databases. It provides the security, availability, and reliability of commercial databases at 1/10th the cost.