several nines



AUTONOMOUS MYSQL

DATABASE INFRASTRUCTURE

FOR A DATA COMPANY

BYSIDE

- Industry: MarketingLocation: Portugal
- Data Centers: 7 (2 owned+5 3rd party)

USE CASE

A data-driven company wishing to transform its dated MySQL database to a modern highly available architecture with automatic failover.

WHY SEVERALNINES

Simple deployments, automated operations and increased efficiency which had the secondary effect of reducing maintenance efforts and costs.

INTRODUCTION

BySide is a worldwide digital marketing company specializing in lead generation for the telco, banking, and retail industry. Their unique analytics platform collects data on user interactions on the web and creates a personalised customer journey profile; allowing for an actionable marketing strategy.

BySide enables their clients to access all the data from a central repository and create personalised marketing campaigns, engagement tools (like surveys & widgets), emails, and other communication types to convert visitors to potential customers.

By accelerating the marketing strategies, BySide minimizes bounce rates and maximises conversion rates on any website visit. All of this is made possible by BySide's ability to collate and churn data for analytics - all in real-time.

CHALLENGE

Because BySide is a data-centric company, it relies heavily on its MySQL database. They need to continually generate and deliver millions of data points hourly with high availability and at high speed for their customers. They realised that to continuously fulfil their Service Level

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João Pereira, Lead Engineer at BySide

Agreements to their users, an immediate review on the current database was required.

"Our MySQL deployments were outdated, not only in one but various geographical locations with no failover mechanisms. The chaos for any failure and disaster recovery was unimaginable," said João Pereira, Lead Engineer at BySide. "We felt it was too risky to migrate to a clustered deployment on our own so we began the search for an automated database solution to meet our high availability needs."

BySide wanted an operational system that would not only monitor their databases, but manage them as well, offloading several daily tasks of their DBA team. They needed a solution that could fully automate their MySQL operations, including managing backups, failover and recovery operations.

SOLUTION

The team conducted research on high availability and automatic failover solutions for MySQL. This led them to evaluate clustering solutions like MySQL NDB Cluster, MariaDB Cluster, Percona XtraDB Cluster and Vitess. They soon realized that the change was going to be difficult and high risk as they did not have specialized knowledge on these stacks. This is when they shifted their focus to a database automation solution.

In the end, they shortlisted two solutions which might work for the failover mechanism - Orchestrator and ClusterControl. ClusterControl was the clear winner in the comparison, as it did much more than just failover.

"ClusterControl was perfect, it's easy-to-use, built with a failover mechanism, and supports older versions of MySQL," said Pereira. "It's like a database wizard for deploying, managing, and monitoring effortlessly."

ClusterControl met the critical needs of BySide;

- It was a fully automated database management system with automatic failover capabilities
- It eliminated the need for a full time DBA.
- It provided insight into their databases via the monitoring dashboard, allowing the team to get notified of any irregularities which allow for prompt actions to avoid any downtime.

In addition, ClusterControl's reporting tools provided operational reports to enhance database performance continuously. With all these excellent features, ClusterControl was the ultimate solution to solve all database problems for BySide.

WHY SEVERALNINES?

It took the BySide team only two weeks to move to a production environment after their testing and evaluation was completed. ClusterControl was so easy-to-use; letting them perform their entire deployment on their own, without any assistance from the Severalnines support team. João Pereira expressed delight on how ClusterControl managed it all," ClusterControl works like a charm, we now worry less about our databases and focus more on product development to offer better services for our clients. Since the deployment, sometimes we almost forget ClusterControl is there because it just works. We for sure believe, with ClusterControl, there will be minimal downtime for our customers."

- Easy Cluster Deployment with Point-and-Click Interface: With ClusterControl, cluster deployments can be done with a simple to use interface, without any external support or expertise. BySide were delighted with the move to production in such a short turnaround time; breaking all their initial worries about migration issues. ClusterControl was straightforward, simple-to-use, and feature-rich, suitable for any organization looking for rapid implementation.
- Advanced Monitoring and Reporting Features:
 ClusterControl's advanced monitoring and reporting features allowed the BySide team to gain insights into their database performance and take appropriate actions where necessary.
 With ClusterControl, they could easily monitor their databases, especially query performance; improving their overall application performance.
- Automated Failover Technology: ClusterControls
 automatic failover helps to keep the databases up-and running. This feature greatly helped BySide to maintain high
 availability and eliminate the need for a time-consuming,
 manual failover process which is prone to errors. As João
 Pereira put it, "We have managed to shift the focus of our
 DBA team to other important issues, as now MySQL is not a
 problem anymore."

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