several9s

Reducing manhours and increasing database performance at payment provider



WESTPAY

WESTPAY

Industry: Financial services Technologies: MariaDB, MySQL, PostgreSQL Datacenters: 3 Products: ClusterControl

USE CASE

Managing availability and performance of a writeintensive payments database

WHY SEVERALNINES

Advanced monitoring and performance alerts coupled with automatic failover that saved the company a lot of man hours

BACKGROUND

Westpay provides smart transaction and payment solutions for merchants in-store as well as for the e-commerce and self-service markets. They also offer a complete solution for all types of payments and for all kinds of applications within various industries, such as retail, hotels, restaurants, and the retail banking sector.

Westpay is certified in the major areas for payments, including PCI PIN Security, PCI DSS, and PCI PA-DSS, and maintains a very high level of security in their systems. They currently provide their services in Europe, Asia, Australia, and Africa.

CHALLENGE

In the payment processing world, data is everything. From handling the read and writes, to verification, to security and backup, it's all about the data. Westpay, which provides credit card processing for retailers and restaurants worldwide, leverages different open source database technologies to achieve its application goals. Using a combination of MariaDB and PostgreSQL setups, Westpay has built an advanced, secure, and rapid-fire system to make taking payments simple and fast.

With great success, however, also come challenges with scale. "Our environment is extremely write-intensive," said Tomas Nilsson, CTO of Westpay, "We process several hundreds of thousands of transactions in our databases on a daily basis." Keeping track of that level of traffic and then determining how to tweak performance was becoming more and more of a hardship on the Westpay team.

The database was the center of their platform, and it was struggling to keep up with the rapid growth.

Monitoring and adapting the performance of our systems; while growing in the market was a great challenge for us. We would spend lots and lots of hours manually tweaking our systems to make them work.

Thomas Nilsson, CTO Westpay

The Westpay team always seemed to be playing catch-up, spending hours fixing one problem just to have another arise, occasionally even causing outages when someone would accidentally "break" something by mistake.

Their systems were suffering as a victim of their own successful growth and they needed help. They set out to find a better way of doing this, a better way to scale their application without spending countless man-hours manually tweaking and tuning. They needed an easy-to-use and reliable, enterprise-grade database management system.

SOLUTION

As most do, the Westpay team took to Google to find a solution to their problems. They evaluated several opensource projects and even explored the idea of purchasing database support from Percona; however, neither option provided them with a single path solution to their challenges.

Upon finding ClusterControl they quickly downloaded and started playing with it to see if it met their requirements. "We needed a management product to ensure the highest possible uptime while running at the best possible performance at all times," said Nilsson.

For the Westpay team, ClusterControl was "by far the easier management tool to install and work with." They had it installed and running with no support from the Severalnines team.

They also realized that it was the only tool on the market that automatically pushed suggestions and performance improvements about the production databases through email.

OUTCOME

At Westpay, ClusterControl has saved the Operations Team some very valuable time that they can now spend developing other services. "It's a great product with great features," said Nilsson. "It's well worth the money to ensure stability and the best possible performance."

ClusterControl provides the means for ensuring the highest possible uptime as well as running best possible performance at all times.

Thomas Nilsson, CTO Westpay

High availability is managed by ClusterControl, with failover procedures completely automated. "The way ClusterControl works when something happens to one of the nodes is fantastic," said Nilsson. "We now wipe and restore a slave database in just minutes instead of spending hours setting up and restoring data."