

POWERING THE AUTOMATION OF ON-PREMISE DATABASES

KICKBACK REWARDS SYSTEMS

- Industry: Retail
- Location: United States
- Data Centers: 4

USE CASE

Advanced database systems managed by home grown scripts which required a lot of time investment to maintain.

WHY SEVERALNINES

On-Prem automation of open source database clusters

INTRODUCTION

Twin Falls, Idaho based KickBack Rewards Systems (KRS) was formed in 1999 to help retailers reward their best customers as well as gain unparalleled insight into their consumer demographics and their shopping habits.

Over the years, KRS's award-winning solutions have not only helped its clients improve their understanding of their customers, but it has also introduced innovative marketing solutions making it possible to act on the accrued data.

Their mission "To make good customers better" has resulted in increased frequency of store visits and ticket averages, and lower turnover for thousands of clients across the United States and Canada.

CHALLENGE

At the heart of any loyalty program is it's database of customers and their related information. Ensuring that those databases run efficiently, stay secure, and perform is crucial to the success of their operations.

Kickback Rewards ran their infrastructure using a hybrid cloud model, some on physical data centers and some in cloud environments. While

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they preferred the functionality and features that came along with the cloud side of things, they could only run some of their operations in the cloud. "We didn't want to and couldn't move all of our assets to a cloud environment," said Brian McManus, CTO of Kickback Reward Systems. "A few of our clients even specifically requested that we do not use cloud assets for their customer rewards programs."

Database cloud services offered Kickback automated deployments, backup and restoration, failover, and assistance with monitoring and maintenance but their on-

prem setup was running on homemade scripts. While this allowed them to remain compliant and keep the lights on, it was just too inefficient. “My team had done a really good job building our own home-grown solutions to ensure disaster recovery, business continuity and security and compliance,” said McManus, “but the limitations were showing and it seemed to be that MySQL Database Management and Administration was all the team was doing.” Maintenance of their maintenance scripts was becoming a full time job.

“In ClusterControl, we found security patching, compliance monitoring, load balancing, and automated failovers to be far superior than what we had ever home-brewed.”

Brian McManus, CTO of Kickback Reward Systems

There had to be a better way, so they set out on line to find a better way of managing their on-premise database operations. Their requirements? The system had to support specific versions of MySQL, they wanted support for Galera Cluster and ProxySQL, and it had to tick all the boxes of maintenance they had come to expect from their home-grown solutions.

SOLUTION

The team at Kickback Reward Systems were familiar with Severalnines & ClusterControl but had never given it much thought in the past. Now with all the additional requirements and the increased need, they decided to give it another look.

ClusterControl allowed them to look across all their OLTP systems with a “single pane of glass”, regardless of topology, platform, or how it was implemented. It offered them the Galera Cluster and ProxySQL support they needed as well as full

“hands off” cluster and node auto-recovery.

During the initial implementation the team was able to get things setup and functioning. “We spent a year building out our highly-available on-prem clusters,” said Erin Kolp, DevOps Technical Lead. “This covers from conception to architecture to design to data migration to full implementation to production. The sales support engineers were fantastic as well, providing deep knowledge of database and on-line transaction processing systems.”

NEXT STEPS

“We’ve found ClusterControl to be a comprehensive and cohesive solution for large-scale OLTP deployments.” said Kolp.

After the deployment, the team decided on MySQL Replication Clusters rather than Galera Clusters. They found their workloads would be a better fit for replication setups. Using ClusterControl they were able to make the switch-over live and in real-time. “The trick was doing it live, while the master (writer) ran to process transactions,” said Kolp. “Our engineers were able to re-work and re-deploy the clusters with the assistance of ClusterControl and it’s powerful deploy/configuration abilities.”

Next up, they are evaluating the functions in the ClusterControl Command Line and API. “We look forward to extending and enhancing this solid database management platform,” said Kolp. They also plan on integrating the remainder of their existing database systems into ClusterControl so that they can have true unified management and monitoring.

WHY SEVERALNINES?

- **Improved Productivity:** Through the implementation of ClusterControl, Kickback Reward Systems has seen massive gains in productivity as their engineers are no longer having to maintain the plethora of home-grown scripts for disaster recovery, business continuity, security & compliance.
- **High Availability with Reduced Downtime:** Kickback Reward Systems have enhanced uptime for the systems due to the quick and easy way in ClusterControl to promote slaves, handle failover, and perform maintenance.
- **Open Source Support:** ClusterControl fully supported all their pre-existing open source systems out of the box allowing them to transition easily and continue their support of the open source community.