VENTRAIP AUSTRALIA

- Industry: Web Hosting
- Location: Australia
- Data Center: (2) Sydney & Melbourne

USE CASE
Migration from a standalone MySQL to a multi-master clustered environment to improve performance and enable redundancy.

WHY SEVERALNINES
Seen as experts in database clustering who provide a comprehensive system to deploy, manage, and monitor Galera with just a few clicks.

INTRODUCTION
VentraIP is the largest privately owned web host and domain name registrar in Australia, backed by a team of industry veterans and local technical professionals who ensure customers always get the best service and technical support 24 hours a day, 7 days a week.

Founded in 2010, the company is 100% Australian owned and operated. By providing market-leading innovation and outstanding customer service and technical support it has amassed a growing base of more than 150,000 customers who trust the company with their domain names, web hosting, SSL certificates, and virtual servers.

VentraIP is committed to being the largest independent solutions provider and domain name registrar in the Australian market. Their mission is to assist businesses and corporate entities of all sizes to connect with their customers through a variety of technologies; backed by a team who uphold the highest standard of service and support.

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Kyle Thorne, Network & Infrastructure Manager

Challenge

Database management is crucial to a company that deals in domain names. The database is constantly being accessed and modified by customers logging into the front end of VentraIP's website to purchase, renew, and manage domain configurations.

The challenge for VentraIP was that this entire system was being controlled by a standalone MySQL instance operating on a cPanel. In the evening and at other peak times the load was so high on this standalone instance that performance quickly grinded to a crawl. “Huge amounts of load were causing slow downs to horrible levels,” said Kyle Thorne, Network and Infrastructure Manager for VentraIP. “We needed to spread the load across multiple servers.”

While their system never crashed, the challenges were fast becoming noticeable by their users. Potential customers were trying to order items on the website and it would run very slowly...at times driving them away. When the complaints started coming in, and with loss of revenue in sight, the team knew it was time to act.
WHY SEVERALNINES?

After experiencing multiple complaints from customers about their ordering form / customer control panel performance, and after trying another custom solution, VentraIP Australia needed to try something else; and it wasn’t something that adding better server hardware was going to fix. “ClusterControl was the first solution we tried and we never had any problems with it,” said Thorne, but there were also other reasons why they selected Severalnines as their database clustering partner...

Performance - ClusterControl delivered on the performance they required to handle the traffic on their front-end. “Managing Galera Cluster with the HAProxy load balancer via ClusterControl spreads the load out so evenly across all three nodes,” said Thorne. “The problem of reaching the database limits is completely gone.”

High-Availability - Ensuring redundancy is imperative for a system in production. VentraIP didn’t have that when they were operating on a standalone MySQL instance, but with this new setup in place it is now. “Everything the customer would use is now fully redundant,” said Thorne.

Support - During the setup of the new environment VentraIP leveraged Severalnines’ documentation and support team for advice and best practices. “The Severalnines Support Team responded surprisingly quick; we were worried it would take a day but in reality it was minutes.”

Features & Integrations - In addition to leveraging ClusterControl to deploy Galera Cluster VentraIP are also using the backup and failover features to ensure their data is protected and instantly available should an issue appear. They are also using the Nagios plugin to augment monitoring of the cluster as part of their overall server monitoring efforts.

SOLUTION

When the problem first arose the team attempted to deploy their own, custom-made MySQL Master-Master replication setup. Unfortunately, it did not work out as planned. VentraIP’s CTO began researching technologies on the internet and soon discovered MariaDB Galera Cluster. The technology, a mature and battle-tested Multi-Master database clustering technology, seemed to be the perfect fit for their application. With some additional research they learned about ClusterControl. “Our CTO gave the software a try and it worked perfectly,” said Thorne.

After running ClusterControl on some spare servers they had lying around, they spent the next thirty days evaluating the Enterprise version of the product and playing with different tools and setups to perfectly pair their database and application needs. In the end they deployed into production a multi-node MariaDB Galera Cluster with Keepalived caching and a HAProxy load balancer - all via ClusterControl.

Recently they have re-provisioned the setup migrating it from Linux Centos 6 to Centos 7 and adding nodes. According to Thorne, “The second time was even easier.”

THE RESULTS

The combination of ClusterControl and Galera Cluster was the one-two punch that VentraIP needed to solve their performance challenges and deploy an infrastructure that is built for future growth and expansion.

Since putting the full implementation into production there have not been any additional performance issues or customer complaints. They have not had a single service interruption nor have they come close to reaching the limits of the cluster. “There’s been literally no complaints from customers or our developers,” said Thorne.

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