several9s

Tackling growth and frustration with database automation

BLUE LIGHT CARD

Industry: Advertising
Technologies: MySQL
Hosting: On-prem
Datacenters: 1
Products: ClusterControl

USE CASE

A replicated MySQL setup with several single points of failure, held together with custom scripts and prayer

WHY SEVERALNINES

Implementing database automation allows the entire team to aid in the monitoring and management of a complex database stack

BACKGROUND

Blue Light Card is a discount service for those in the UK's Emergency Services, NHS, and Armed Forces this includes volunteers for these services. It works with both local independent retailers as well as national companies to allow them to offer a discount to this audience both online and on the high street. Blue Light Card members can find out details about the offers, as well as offers near to them, through its website and mobile app.

These discounts can be used on a variety of things from car purchases to hotels to daily needs.

CHALLENGE

Any system that has users accessing it around the clock can't afford much downtime. The team at Blue Light Card had been managing a complex setup for a long time...and it was growing more complex by the day.

"Our system consisted of a whole host of custom-written scripts that were either manually run as the result of an 'if this then that' flow chart or were cron jobs just to keep our MySQL infrastructure online; especially under high load," said David Hinchliffe, Head of IT at Blue Light Card, "We required 24/7/365 uptime and high-speed data access; all in real-time, so things like batching jobs just couldn't be done."

The systems and applications which empowered Blue Light Card stored massive amounts of data and the team found themselves in a growth period where data growth, infrastructure costs, time demands, and more all seemed to be getting larger.

> *Our solution was always complex...master/slave setups and sql proxies, the skill level needed to manage those systems is incredibly high.*
>
> David Hinchliffe, Head of IT at Blue Light Card

The database powering their infrastructure was a clustered MySQL setup. "We needed a way for any IT literate members of our staff could easily keep an eye on the setup and monitor it."

The infrastructure was also prone to several single points of failure, both from a technology perspective as well as from a personnel one. The team only had a single database expert to manage this setup, which was growing more complex by the day. The cost in both man-hours and the skill set needed was too high.

SOLUTION

Hinchliffe needed three key things to solve his team's challenges.

1. A solution that would allow them to reduce the number of custom scripts which in turn would remove many single points of failure.

2. A solution that makes cluster recovery and repair easy, and if possible, automated.

3. A solution that would allow all the members of his team to be able to help with the management and monitoring.

While searching for some technical information, he came across ClusterControl. He was impressed with the number of features it offered and by the simplicity of the interface.

> *I tried a demo of ClusterControl and was blown away by everything it did, so I never really look at any other vendors.*
>
> David Hinchliffe, Head of IT at Blue Light Card

OUTCOME

From the time that Hinchliffe began evaluating to having the fully deployed solution took under a month. His entire team now has access and is assisting in the monitoring and administration of the database stack. This has also reduced the burden of his subject matter expert, preventing potential burnout.

> *The increased analysis and reporting has been a real eye opener. It's allowed me to identify problems we never knew we had and resolve them.*
>
> David Hinchliffe, Head of IT at Blue Light Card

"If you're looking at running multiple replicated database servers across many different physical machines, with many databases of great size, then ClusterControl makes managing that real estate considerably easier and less resource-intensive," said Hinchliffe.