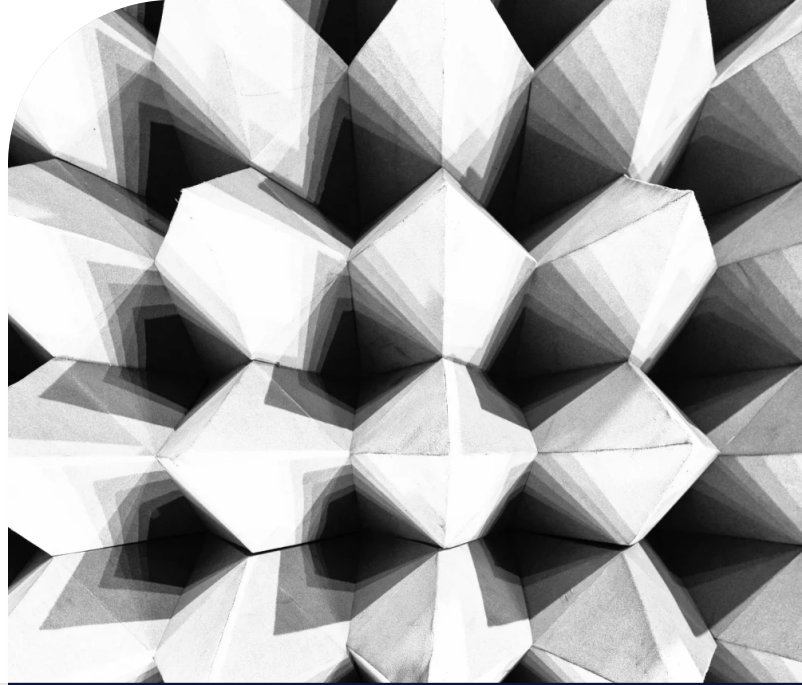# several9s

Taking database high availability into the stratosphere

SPEEDCAST

Industry: Telecommunications
Technologies: MySQL
Hosting: Cloud
Datacenters: 10+
Products: ClusterControl

USE CASE

An interconnected telecommunications system using MySQL Cluster to power an internal cloud service

WHY SEVERALNINES

Advanced knowledge in MySQL Cluster with robust features that reduce maintenance needs, increase productivity and uptime

BACKGROUND

Speedcast is the world's largest global satellite communications and network service provider specializing in satellite connectivity for remote situations like oceanic shipping, remote energy production, and other applications where traditional communications technologies are not possible. The company offers high-quality managed network services in over 100 countries.

"Speedcast integrates satellite capacity with extensive cellular, fiber, and microwave networks," said Ioannis Tampakakis, Software Systems R&D Manager at Speedcast "all backed by 24/7 multilingual technical support centers."

As you can imagine, maintaining a robust network and content delivery system across 80 satellites in the most remote regions of five continents is no simple task.

CHALLENGE

When Speedcast began developing a new internal cloud service they knew that a high availability database would be a key factor in its success. When working on the system architecture based on MySQL (NDB) Cluster, they knew that they had a choice; either they could hire a Database Administrator (DBA) who was experienced in NDB, or find a system that their existing team could use to manage the database. So what we're the requirements for this system? Outside of the normal requirements of monitoring and backup management, Speedcast had to have advanced failover features as well as integration into their other monitoring systems.

In addition to the system, however, Speedcast needed a company that could provide them with vast experience on MySQL (NDB) Cluster. This database was designed to deliver 99.999% availability predominantly for mission-

critical applications in the telecommunications industry, and Speedcast needed a partner who could help us use it correctly.

> *This was a major project for our company, and it is now used in more than 1500 remote sites globally.*
>
> Ioannis Tampakakis, Software Systems R&D Manager, Speedcast

SOLUTION

Setting out onto the web to find a software alternative to adding a headcount to the team, Tampakakis first took a look at MySQL Cluster Manager (a software tool provided by Oracle MySQL as part of their license offerings). Next, he came across ClusterControl and found it to be richer in features and automation options.

In addition to the robust features of ClusterControl, Severalnines had deep expertise in NDB and it employed some of the original team members of the NDB team at MySQL.
Severalnines' expertise with this specific database technology combined with its automation software had now met all the requirements of the project.

OUTCOME

It took the Speedcast team about a week to get ClusterControl integrated with their new environment, and with preconfigured, battle-tested MySQL Clusters deployed... all without the need for any support from the Severalnines team.

> *ClusterControl has improved our uptime, and capacity, and increased our productivity. It has improved the sustainability and maintenance of our database services.*
>
> Ioannis Tampakakis, Software Systems R&D Manager, Speedcast