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ClusterControl saves leading APAC payment gateway service provider DBAs a day per month

Payment Gateway Service Provider

Industry: Payment services

Technologies: MariaDB

Products: ClusterControl

Environment: 2 on-premises data centers

Use case

A leading APAC payment gateway provider relies on ClusterControl to manage high-availability MariaDB clusters across two data centers, ensuring PCI-compliant performance and saving their DBAs significant time each month through streamlined monitoring, backup, and incident response.

Why Severalnines

ClusterControl's powerful GUI, proactive monitoring, and responsive support team enable efficient, centralized database operations—reducing operational stress and saving up to a full day of effort per month for a small but specialized DBA team.

Background

A **leading APAC payment gateway service provider** delivers secure, scalable payment solutions for businesses of all sizes. Renowned for its reliability, security, and ease of use, this provider supports online stores, mobile businesses, and organizations requiring robust recurring billing solutions.

Supporting this mission-critical payment infrastructure is the **Platforms and Automation team**, responsible for the administration and maintenance of the company's server fleet, business databases, and automation of code pipelines across multiple data centers. Their mandate is to ensure continuous service delivery in a regulated, always-on environment.

Challenge

This APAC payment gateway's business depends on absolute reliability, fault tolerance, and compliance with the strict standards required in the payments industry, including PCI DSS. As transaction volumes continue to grow and regulatory requirements intensify, so has the company's core needs around availability, operational efficiency, and compliance:

- **High availability and fault tolerance:** Payment processing workloads require zero downtime and immediate failover capabilities across geographically distributed sites.
- **Operational efficiency:** With a small, specialized team with a large mandate, they need a solution that simplifies complex database operations.
- **Compliance:** All solutions must maintain or enhance PCI compliance.

When the current team joined, the decision to use ClusterControl had already been made by previous leadership and prior approaches to achieving high availability, failover, and observability are unknown, as the current team was not involved in earlier evaluations.

Solution

Regardless, the team is heavily utilizing ClusterControl's GUI for centralized cluster node management and recovery, real-time performance monitoring and alerting and streamlined user and backup management for their MariaDB clusters. The implementation details are as follows:

Implementation details
- **Cluster Topology:** 5 MariaDB Galera clustered primary nodes and 1 read-only MariaDB replication node, distributed across two geographically separate data centers.

MariaDB Database Cluster Architecture
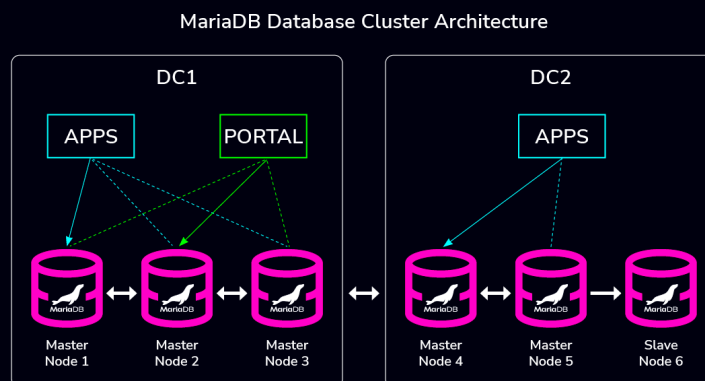
- **Operational Workflow:**
  - Backups and reporting operations are offloaded to the read-only replica, ensuring transactional workloads remain unaffected.
  - Real-time monitoring, alerting, and GUI-based management enable proactive response to incidents.

The Platforms and Automation team engages Severalnines technical support for general guidance and whenever incidents arise. The support engineering team has consistently been timely and effective, contributing to stable operations and confidence in the platform.

In fact, a Senior DBA stated that, on the rare occasion an incident does occur, they are able to respond to and resolve it "half a day quicker" by using ClusterControl to efficiently gather the logs and collaborating with the responsive support engineering staff to analyze them.

Outcome

Although previous management selected ClusterControl, the current team is satisfied with the platform and has experienced multiple benefits that have produced quantifiable results:

Performance optimization: ClusterControl's monitoring enabled identification and resolution of resource-intensive queries, resulting in reduced system load and improved application performance.

Operational efficiency: The intuitive GUI has significantly reduced routine database administration, backup oversight, and incident response overhead, saving them "at least a day's worth of effort per month."

Improved focus: Automated alerting and monitoring allow the team to focus on broader engineering initiatives, reducing the need for manual system checks.

"Having ClusterControl to monitor and alert on our database instances allows us to concentrate on other tasks and duties with the confidence that we will get notified promptly when necessary. The intuitive GUI gives us a unified view of our environment, dramatically simplifying administration and incident response."

Platforms and Automation Manager

The benefits have not only been quantifiable; their daily operational life has been made much less stressful. Maintenance and incident handling are now more straightforward, and they now have a clear, actionable view into critical system information and operations like backups.

Conclusion

The company's architecture is currently under review as it evaluates the best path forward to meet evolving business and technical requirements. It remains committed to open-source technologies for their flexibility, feature richness, and cost-effectiveness. Future plans for ClusterControl and related database infrastructure will be aligned with the outcome of this ongoing review.

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