

CASE STUDY

Viafirma achieves 100% availability for their PostgreSQL clusters with ClusterControl

Viafirma

Industry: Digital signature / identity solutions

Technologies: PostgreSQL

Products: ClusterControl

Environment: 4 on-premises data centers

Use case

Achieve continuous availability for their multi-data center PostgreSQL clusters that support their digital signature platforms, ensuring global scalability, zero-downtime, and reduced operational overhead.

Why Severalnines

Viafirma chose ClusterControl due to its proven high availability for native PostgreSQL, operational efficiency, and cost-effectiveness compared to other solutions.

Background

Viafirma is a global leader in digital signature, authentication, and digital identity solutions. Operating in more than 20 countries across Europe and Latin America, the company provides trusted services that power digital transformation for businesses, public administrations, and financial institutions. Viafirma's platforms have enabled over 500 million secure, compliant digital signatures worldwide.

Supporting their efforts is Diego Gil Serrano and his technology department, who are responsible for the continuous operation, security, and evolution of Viafirma's digital signature and identity services. His team's role encompasses a broad remit, including;

- Coordinating technical development, infrastructure, and support
- Ensuring cybersecurity, disaster recovery, and business continuity
- Managing technology infrastructure across cloud and on-prem environments
- Overseeing the implementation of secure and scalable solutions compliant with international regulations, e.g., eIDAS.

Challenge

With a growing international presence and regulatory obligations across multiple jurisdictions, Viafirma needed to ensure:

- **Continuous availability:** Zero-downtime for customer-facing digital signature platforms,
- **Multi-data center replication:** Reliable data protection across four geographically distributed data centers,
- **Reduced operational overhead:** Reduced manual intervention and streamlined database operations for a lean technical team.

Solution

Viafirma's team evaluated a range of high availability solutions, including CockroachDB, Bitnami postgresql-ha, and Percona — ClusterControl stood out for three reasons:

1. **Proven high availability for native PostgreSQL:** Automated failover, disaster recovery, and multi-data center support.
2. **Operational efficiency:** Easy deployment, cluster maintenance, and node management.
3. **Cost-effective:** Flexible licensing fit for complex, distributed architectures.

“Clustercontrol is a very good tool for HA for a database like Postgres, which doesn't natively allow more than one master node. With this tool, we've managed to quickly set up HA without much effort. Setting up a cluster takes a matter of minutes, and the tool itself takes care of everything.”



Diego Gil Serrano, IT Manager, Viafirma

The team implemented six clusters (each with one primary and two replicas), supported by Severalnines's expert support, enabling a phased and low-risk migration from legacy systems.



Outcome

Diego and his team have been able to achieve, “100% service availability at all times.” In the past, they’d have to tolerate downtime when increasing their database’s size. But with ClusterControl, they are able to perform this operation without any downtime by using the platform to first increase the size of a replica before seamlessly promoting it to primary.

From replication and maintenance to backup and monitoring, ClusterControl has simplified every aspect of the database lifecycle for Diego’s team. Consequently, they now have more time to spend on higher-value projects, such as optimizing the apps that connect to the databases.

“With ClusterControl, our team moved from firefighting to innovating. We have peace of mind, knowing our databases are highly available, and our operational overhead has dropped dramatically.”

Here are some of the key operational results that Diego highlighted when reviewing CC:

- **Operational efficiency:** Backup automation and cluster monitoring dramatically reduced manual intervention.
- **Service continuity:** Automated failover with HAProxy-based traffic management, outages are invisible to end users.
- **Robust disaster recovery:** Confident recovery across multiple data centers.
- **On-demand scalability:** Quick, risk-free node management to support business growth.
- **Continuous improvement:** Monitoring tools support ongoing optimization of database and application performance.

Putting it all together

By leveraging ClusterControl, Diego Gil Serrano and his team have positioned Viafirma’s IT operations to support global growth, deliver regulatory-grade reliability, and focus on continuous improvement, turning the database layer from a risk to a competitive advantage.

Currently focused on modifying their applications to use the read and write nodes simultaneously for faster processing, ClusterControl is also enabling them to consider implementing additional databases, i.e. MySQL and Redis, better suited for other applications.



Ready to automate your databases anywhere?

Download now and you’ll be running your database in just minutes.

Get started