Alkemics and Percona Guarantee Database High Availability and Uptime to Match Company Growth

Alkemics helps customers leapfrog outdated frameworks and overly complex tools with a solution that’s built specifically for digital. It has the omni-channel shopper at its core. Their SaaS platform connects suppliers and retailers to jointly improve the quality of their data and automate how they share it with trading partners. These connections create a collaborative data ecosystem, capable of informing better business decisions and improved shopping experiences through smarter shopping data.

Alkemics believes that better retail starts with brands and retailers using data that’s accurate, organized, and synchronized so that it is never obsolete and always actionable. Digital has accelerated the evolution of brand-retailer relationships, raising the bar on the knowledge required to succeed. Collaboration is no longer optional, it is the new normal.

“Our clients, both distributors and retailers, need our data services to better reach their customers and take advantage of sales opportunities. This makes a performant and available database crucial to our business, especially as we grow and take on new clients and markets. With Percona’s help, we were able to ensure an optimized database that meets our customers’ needs.”

Guillaume Morin
- Head of Production and Infrastructure at Alkemics

“Our retail and distributor data services allow both sides to make selling decisions based on solid data. This means they can better reach their business targets and revenue goals. Our database is the key component to this process, and we must guarantee that it runs as efficiently as possible,” said Guillaume Morin, Head of Production and Infrastructure at Alkemics.

Alkemics needed to ensure that as they grow to other markets in other countries, their database environment remained responsive and available for clients and customers.

Alkemics chose Percona to help them investigate how to best ensure their high availability and uptime. They found Percona through its reputation as a leader in MySQL optimization techniques. Alkemics engaged Percona to check their systems and verify if everything was configured as defined by “best practices.” They also wanted to identify the cause of high memory usage issues.

The first step was a Percona Database Performance Audit. During the audit Percona identified the following areas that needed attention:

Alkemics engaged Percona to:
- Audit the database environment’s architecture and performance
- Help tune and optimize the database environment for high availability
- Ensure that the environment was ready for company growth expectations
• Linux Transparent Huge Pages on hosts caused high memory usage issues
• Even with a great deal of RAM available, the database was still often reading from the disk
• There were a high number of duplicate and unused indexes
• Many of the tables were fragmented

The audit produced several suggestions designed to optimize the replication process, as well as ways to make the Percona database more responsive and available, including:

• Disabling Transparent Huge Pages
• Increasing the InnoDB buffer pool
• Tuning some of the database software variables
• Deleting the unused and duplicate indexes
• De-fragmenting some of the tables
• Reviewing queries on a regular basis

Percona’s recommendations and assistance in implementing solutions helped Alkemics guarantee that as their customer base grows, their database environment will match growing demands and provide an excellent customer experience.

With Percona’s help, Alkemics could cut their memory consumption by 45% – providing excellent resource overhead to expand their database for future growth.

**Percona Database Performance Audit validates that your environment matches your workload**

A **Percona Database Performance Audit** is designed to make sure that your data is built on a solid foundation that will meet high-performance demands. This service begins with a full analysis of your database, your applications and the surrounding infrastructure. It provides recommendations that take into account performance, availability, functionality, resilience, and future capacity. “Percona is a recognized leader in database optimization. They quickly assessed our environment and needs, and provided different options for ensuring that growth didn’t impact performance,” said Guillaume Morin.

**Percona Server for MySQL provides a stable environment for growth**

Alkemics is using **Percona Server for MySQL**. Percona Server is a free, fully compatible, enhanced, open source drop-in replacement for MySQL that provides superior performance, scalability and instrumentation. With over 1,900,000 downloads, Percona Server’s self-tuning algorithms and support for extremely high-performance hardware deliver excellent performance and reliability.

**Percona Database Consulting quickly gets to the heart of issues and optimizes performance**

**Percona consultants** have decades of experience solving complex database performance issues and design challenges. Available globally 24x7x365, Percona’s experts have worked remotely and on site with more than 3,000 clients.

**Contact Us Now**

To determine what open source database solution is right for your business, please call us at +1-888-316-9775 (USA), +44 203 608 6727 (Europe), or email us at [sales@percona.com](mailto:sales@percona.com).