Lookout Uses Percona’s Cloud Expertise to Reduce Footprint and Maintain Uptime

Lookout takes a mobile-first approach to security, and protects mobility for some of the world’s largest enterprises, critical government agencies and tens of millions of individuals worldwide. They have achieved this by partnering with leaders in the mobile ecosystem globally. Lookout is laser-focused on creating mobile-first, cloud-first products not just for IT administrators and CISOs, but individuals as well.

As a mobile security company, Lookout’s database environment is crucial to providing customers with security assurance for mobile devices. Their databases store critical data for their mobile security applications. Lookout uses the Amazon Web Services (AWS) platform with Aurora as their main database software. “While we are security experts, Lookout doesn’t necessarily know everything about databases. As we streamlined operations and increased our business, we were looking for ways to simplify and optimize our AWS deployment,” said Michael Fortson, Director of Engineering at Lookout. “Database uptime is crucial for us and our customers – our applications need to be responsive at all times, without exception.”

Lookout needed to ensure that as they grow and increase their customer base, their database environment remained responsive and available – with an eye to increasing efficiency and more effectively using their AWS deployment.

Lookout chose Percona to help them investigate how to best ensure uptime and reduce overhead. They found Percona through its reputation as a leader in database and cloud environment optimization techniques. Lookout engaged Percona Managed Services to check their systems and verify if everything was configured and integrated according to best practices.

The first step was a Percona Database Performance Audit. Percona cloud database experts pinpointed ways to reduce Lookout’s cloud footprint. Their initial configuration involved 35 sharded master/slave pairs. They decided to move their architecture from a sharded master/slave topology to a micro-services-based infrastructure.

“Combining Percona Managed Services with Amazon RDS and Amazon Aurora enabled Lookout to shift its focus away from maintaining servers and worrying about data replication, towards delivering new features and capabilities to its customers.”

Michael Fortson
– Director of Engineering at Lookout
As the transition was made, Lookout also needed to be able to keep track of key database metrics in order to verify that the user experience wasn’t compromised. For this, they employed Percona Monitoring and Management (PMM). PMM gave Lookout thorough time-based analysis for their AWS environment to ensure that their data was working as efficiently as possible. They used PMM to:

- Examine query and metric information
- Displays current queries and highlight potential query issues
- Maps queries against metrics

With PMM, Lookout could see when sections of their database environment were experiencing bottlenecks and slowdowns.

Percona’s recommendations and expertise helped successfully migrate Lookout’s AWS configuration from 35 master/slave pairs to only 10 server instances. This not only simplified their environment, but saved them significant OPEX costs – nearly 500K per year.

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

A [Percona Database Performance Audit](https://www.percona.com) 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 consider performance, availability, functionality, resilience, and future capacity. “Percona is a recognized leader in database optimization. They quickly assessed our AWS cloud needs, and provided different methods for maximizing our environment and minimizing our costs,” said Fortson.

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

[Percona consultants](https://www.percona.com) have decades of experience solving complex database performance issues and design challenges. Percona’s experts have worked remotely and on site with more than 3,000 clients.

**Percona Monitoring and Management provides actionable metrics for understanding your data**

[Percona Monitoring and Management (PMM)](https://www.percona.com) is a free and open-source platform for managing and monitoring MySQL®, MariaDB® and MongoDB® performance. It provides thorough time-based analysis to ensure that your data works as efficiently as possible. Using Query Analytics to optimize database, and the Metrics Monitor tool for a historical view of metrics that are critical to a database server, PMM provides time-based graphs that are separated into dashboards for MySQL, MongoDB and general system metrics. “PMM is an excellent way to proactively monitor key database metrics so that you can see what is happening with the data in your cloud environment,” stated Fortson.

**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).