Grab Uses Percona to Optimize Application Performance

Grab

About the company

Grab is a company that specializes in on-demand transportation services. They are present in more than 30 cities across six countries in the Southeast Asian region. Countless people use their services every day. As a fast-growing company in a diverse and densely populated region, they want to provide the safest and most accessible transportation and delivery to their customers.

The challenge

Grab needs their data to be available in real-time, all the time. In the past few years, they have seen their users – and the corresponding rider and driver data – scale to 20 times previous levels. Performance in this market is everything. Almost every transaction occurs in real-time, and the database workload is incredibly demanding. Grab uses Amazon AWS for their database but found that they needed more expertise to match their growing business demands.

> *Our databases must be high-performing and always available so that our Grab application provides an excellent experience for our customers, who rely on us for their mobility needs. With Percona Consulting and Support, we know that we can architect solutions that meet our needs, and are covered whenever issues arise that impact performance.*

Edwin Law,
Data Engineering Lead
Grab

"In our business, we can't allow our application to be less than a positive user experience. People need to know that our services will be there when they need them; otherwise they'll use someone else to get from point A to point B," said Edwin Law, Data Engineering Lead at Grab. "Database performance directly impacts application performance, which will affect user experience."

Grab moved toward a different architecture to meet their needs – a split database with Redis caching. While helping to some degree, it didn't quite meet their high expectations.

The solution

Percona was called in to assess the architecture and make recommendations on how to improve performance further. After a health audit, Percona experts found the following:

- The increasing scale of the workload was affecting performance.
- Some queries and the performance schema needed optimization.
- Maximum hardware RDS instance size was reached.

The solution (continued)

Grab needed to optimize their database architecture, and using a primary/replica configuration wasn't possible due to constant replication lag on the replica(s). However, Percona experts were able to recommend various schema changes, query tunings, and architecture modifications to ensure that the database environment is now responsive, available, and meets Grab's performance demands. Even with the increase in scale, Grab's database management team is able to handle the workload demands and still make their customers' experience an excellent one.

Working with Percona

Grab knows that Percona solutions best meet their needs, and that they are covered when they have issues that affect performance.

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.

"Percona Consulting was able to quickly analyze our queries, workload, and environment," added Edwin Law. "They proposed solutions that met our scaling needs and performance. The suggested changes were implemented fast, with no database downtime, and we saw an immediate improvement in our performance."

Percona Support guarantees database optimization

Percona Support is a highly responsive, effective, and affordable option to ensure the continuous performance of your MySQL® and MongoDB® deployments, on-premises or in the cloud. Our user-friendly support team is accessible 24x7x365 online or by phone to ensure that your databases are running optimally. We can help you increase your uptime, be more productive, reduce your support budget, and implement fixes for performance issues faster.

"Percona experts have provided some of the best support in the business," shared Edwin Law. "They seem to have the answer to almost any database issue we have had, and Percona can quickly implement the best resolution to keep our environment's performance high."

Grab engaged Percona to:

- Meet business-critical scaling needs
- Guarantee database availability
- Maintain database performance under tough workloads

For more information, contact us at **+1-888-316-9775** (USA), **+44 203 608 6727** (Europe) or via email at **sales@percona.com**.

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