Migrate to the cloud with zero downtime with dbShards and Google Cloud SQL

A new method
Migrating precious data from one environment to another is a necessary but nerve-wracking task, with big benefits and high risks. Google Cloud SQL lets CTOs and CIOs breathe easier, by working with tools such as dbShards from CodeFutures.

Cloud SQL now supports MySQL Wire Protocol (MWP) connections, which means that Cloud SQL is available from nearly any application, anywhere, including low-latency connections from those running on Google Compute Engine and App Engine. Users can access a replicated, managed, cloud database as easily as if they were running on their laptop. But getting the most out of the cloud often involves migrating applications and data.

Downtime hurts revenue and reputation
“You might want to migrate your database from a data center to a cloud, or from some other environment to a Google cloud,” says Cory Isaacson, CodeFutures’ CEO. “You might want to do it because you’re changing environments, or for disaster recovery. There are all kinds of reasons to migrate. Typically, it is a very slow process, and you’re down the entire time.”

Worse, a bungled or unexpectedly prolonged migration can have a disastrous effect, particularly for online companies, or those offering “always-on” 24/7 services. “If a company is down for a day, the revenue they lose is really significant,” Isaacson adds. “And it’s not just the lost revenue. Their reputation is hurt. They lose users who don’t come back.”

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—Cory Isaacson, CEO, CodeFutures

Replication offers flexibility and peace of mind
Today, CodeFutures uses their dbShards/Migrate software with Cloud SQL and the MySQL Wire Protocol connection to make data migration fast and seamless. “Our methods allows you to do a seamless migration, without any extended downtime,” Isaacson explains. “There are two brief planned maintenance windows of 30 seconds to 2 minutes, one at the beginning of the process and one at the end. Outside of that, you have a continuously running application with reliable writes for all transactions.”

The ability to replicate your data in many places, including many different clouds, gives you flexibility and peace of mind. You’re no longer locked in with one cloud provider or database service. By having copies of your valuable data
in many places, you are completely free to move between them. Even if one data center should somehow fail completely, all of your data is still safe and available elsewhere.

**Migrate with no disruption to customers**

Genoo, providers of online marketing tools and automation for small and midsize businesses, have already put wire protocol support to use. They were outgrowing their existing cloud services provider, but were worried about migrating a live application to another environment. So Kim Albee, Genoo's founder and president, turned to dbShards, who could use MWP to migrate Genoo's database without their customers even noticing. “I've been amazed by what Cloud SQL's MWP support can do. Before this feature, migrating between cloud providers would have been too costly,” Albee said.

“This tool makes me a hero for my customers when something bad goes bump in the night,” she adds. “Literally, they will not even know we were impacted by it. And that is amazing, don't you think?”

—Kim Albee, president, Genoo

**Fast and cost-effective approaches**

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