

Passportal and Percona Help Guarantee Uptime in an AWS Environment



About the company

Passportal simplifies secure password and documentation management for IT professionals. The IT security company offers customers an industrial-strength, fully managed, cloud-based SaaS solution that automates password protection and makes storing, managing, and retrieving client documentation quick and easy. Available to VARs, MSPs, and ISVs worldwide, the platform promotes compliance with industry regulations and helps protect businesses from data breaches, cyber security threats, and network vulnerabilities.

Passportal's customers depend on their data being available in order to run their businesses. Without that availability, these businesses grind to a halt. Some of Passportal's customers must maintain compliance with various regulations and standards – so strict password management is crucial.

The challenge

"Our customers use critical business data to function, and that data must be secure. It is Passportal's job to provide that security in the form of a responsive and always-available password and IT documentation solution. One of the most crucial elements of our solution is our AWS database environment," said Lance Bryant-Grigg, Application Platform Manager at Passportal. Passportal's database contains (among other things) customer information and the systems and data required to manage their customers' end-client password policies and execution. Businesses expect that this information will be available at all times, so database uptime is also one of the most important components to Passportal's success.

To complicate things, Passportal is a growing company that is rapidly increasing its customer base. With that increase comes an equal increase to their database workload. As they navigate their success, Passportal was very concerned about making sure that they continued to provide their customers with an excellent (and expected) experience.

The solution

Passportal's general setup in AWS is a three-node cluster with a fourth node as backup, using HAProxy as a load balancer. Passportal's cluster must be available at all times, and to do this, they use [Percona XtraDB Cluster](#) software.

“When it comes to our customers’ data security, ‘pretty good’ is not good enough. Security is a crucial component of our customers’ business, so it’s a crucial component of our business. Our service needs to be up and available at all times. We work hard to maintain a five ‘9s’ uptime for our Amazon Web Services (AWS) database environment. Percona’s MySQL Support and Percona XtraDB Cluster software in our deployment help us guarantee we are available when our customers need us.”

Lance Bryant-Grigg,
Application Platform Manager,
Passportal

The solution (continued)

Percona XtraDB Cluster allows them to replicate seamlessly to any node. Passportal can build and replace any Percona XtraDB Cluster instance in their AWS production environment in less than an hour, including moving their dataset between instances.

The backup node guarantees no data loss in the event that a node fails. As Passportal's dataset grew larger, it was taking too much time for the backup to restore – up to 14 hours. With Percona XtraDB Cluster in place, this time dropped down to only 25 minutes – a 34-fold improvement in speed.

Passportal also uses [Percona Support for MySQL](#) when deploying and managing database environments. Percona's database support experts enable Passportal to achieve customers' expected experience of several 9's uptime. Percona also helped Passportal maximize AWS return on investment by containing costs and complexity, even as Passportal's footprint has substantially increased.

Passportal depends on its cloud database environment in order to provide important security services to its customers. By using reliable and performant open source software and support expertise from Percona, Passportal can deliver the always-available experience their customers require.

Working with Percona

Percona Support for MySQL provides full-time database expertise

Passportal subscribes to Percona Support for MySQL. Percona Support is a highly responsive, effective, and affordable option to ensure the continuous performance of your MySQL®, MongoDB®, MariaDB®, and PostgreSQL deployments – in and out of the cloud. Our user-friendly support team is accessible 24x7x365 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's experts know what they are doing. Knowing they are available at any time to handle database questions or issues, with expert advice, provides us with incalculable peace of mind," said Lance Bryant-Grigg.

Percona XtraDB Cluster provides a stable environment for high availability and replication

Passportal uses Percona XtraDB Cluster as a replication solution for transactional data. Percona XtraDB Cluster provides a cost-effective, robust solution for applications that require synchronous replication of data, fault tolerant failover and quick, easy scalability across commodity, off-the-shelf hardware. Organizations use Percona XtraDB Cluster to power highly available applications in the most demanding public, private, and hybrid cloud environments. Percona XtraDB Cluster is fully compatible with MySQL, MariaDB, or Percona Server for MySQL. "Percona's XtraDB Cluster software is stable and reliable. I can sleep at night knowing it's doing the job right. I wouldn't use any other replication software in my AWS production environment," Lance said.

The value Percona provides Passportal:

- Percona reduces Passportal's AWS cloud operational and infrastructure costs as Passportal scales to match growth.
- Percona Support expertise reduces database deployment and issue resolution times.
- Percona XtraDB Cluster provides Passportal's high availability backbone for achieving five "9s" uptime.