



Trinity Logistics drives MySQL migration and data improvements with Percona

The challenge

Trinity Logistics is a third-party logistics provider that offers outsourced logistics services to customers of all sizes, including freight shipment arrangement and warehousing. The company uses its combination of skilled personnel and technology to automate manual processes, create efficiencies, increase revenue, and efficiently meet customers' unique needs. The company has an entire team of in-house software engineers that constantly update their technology stack to deliver the best logistics technology available. This empowers both its internal team members and the company's customers by providing the best data to support their logistics experience.

As part of this approach, the Trinity Logistics team has to manage a wide range of technology components that are critical to its applications. When these components have to be updated, the change can be significant and lead to potential risks to service availability or performance. Yet, at the same time, end-of-life software can be a risk.

For Trinity Logistics, MySQL is a critical database technology. Facing an end-of-life date for support around MySQL 5.7, the company had to migrate to the newer version, 8.0. Dustin O'Bier, Infrastructure Manager at Trinity Logistics, and Jonathan Schafer, Architect, Data Engineering for the company, are responsible for the company's IT infrastructure.

The solution

In response to this database issue, Trinity turned to Percona. The company uses Percona Server for MySQL and Percona Managed Services to manage its database environments supporting mission critical applications. When they investigated the migration project, they saw an opportunity to future-proof the company's database strategy for years to come while also completing the move.

The team at Trinity recognized the need for additional support resources for its applications and developer teams as they expanded their technology services. In turn, this could put more pressure on its database infrastructure. Working with Percona, Trinity explored how the migration project could support that expansion and add more value for the business by improving performance, implementing an updated backup strategy, and carrying out much-needed schema changes in the environment. By consolidating their approach, Trinity Logistics would improve its overall performance as well as migrate its database infrastructure to a newer platform.

The Trinity team moved up to Percona Managed Database Services (PMDS) to enhance and maintain Trinity Logistics' environment. This delivers more support and collaboration resources to the Trinity Logistics team, allowing Percona engineers to serve as an extension of the internal technology department. Percona engineers provide proactive advice on changes that can improve performance and act as an escalation point for any issues that might arise around the company's database instances.

Working with Percona

The Percona team is available in a 24x7x365 capacity, acting as Trinity Logistics' database administration staff. This includes taking part in strategy, planning, production release, and development meetings prior to any software release. The Trinity Logistics IT infrastructure and software teams can also rely on Percona to address any production issues that come up, diagnose the root cause of issues, and deliver optimal changes to solve those problems efficiently.

CASESTUDY

For the migration, the Percona team captured Trinity Logistics' application data and used that for testing on the proposed system. This allowed Trinity to evaluate the impact that the migration might have on performance, diagnose potential issues, and work proactively with the Percona team to overcome those challenges. By running the two systems in parallel, Percona and Trinity Logistics were able to ensure a smooth migration and improved overall performance for the future.

As part of the migration, Trinity Logistics also implemented a new backup strategy for the company's applications based on Percona Server for MySQL. This delivered higher availability and data backup, protecting the company against any potential failure in the future. This proactive approach enables Trinity Logistics to plan ahead around its company growth from a data perspective.



I have worked with many MSP in the past, I don't believe I have worked with a partner support team that is so responsive to monitoring, or as thorough with their change processes. I don't think we could have had a more successful migration of our MySQL Production servers.

Dustin O'Bier

Infrastructure Manager at Trinity Logistics

Percona was able to capture and rerun real SQL traffic against test copies of our real data in MySQL 8, then analyze the performance and offer custom-fit solutions to all problems found in our unique situation to ensure a seamless go-live. Database changes are less stressful with them around.

Jonathan Schafe

Architect, Data Engineering at Trinity Logistics

Trinity Logistics works with Percona's engineers for Managed Services and Managed Database Services to deliver the company's data infrastructure. This included planning, architecting, and delivering a Percona Server for MySQL, moving from version 5.7 to version 8.0.

The project delivered the following results:

- Planned and delivered migration with no visible impact for customers
- Expanded data backup approach for more data redundancy and resilience
- Carried out updates to data schema and set-up, improving performance and future-proofing systems for expected growth in customer traffic

About Trinity Logistics



Trinity Logistics is a third-party logistics provider offering People-Centric Freight Solutions® for over 45 years, helping businesses of all sizes succeed in their logistics operations and supply chains. The company offers a wide range of solutions for transportation, including truckload, less-than-truckload (LTL), warehousing, intermodal, drayage, expedited, international, and technology solutions like transportation management systems. The company is part of the Burris Logistics family of companies.

