

5 Reasons You Need to Upgrade to MySQL 8.0

... and how Percona makes it easy.

As you may know, MySQL 5.7 will reach End of Life (EOL) in October 2023. That means there will be no more updates, and more importantly, no more security fixes for discovered vulnerabilities.

EOL alone should be reason enough to upgrade to MySQL 8.0. But if you're still hesitant, here are five more reasons to consider.

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1. Resiliency: built-in HA mechanism

MySQL introduced the first implementation of Group Replication in version 5.7, but it was only in MySQL 8.0 where it has become a mature and reliable feature. The Group Replication is now considered a solid solution addressing HA and resiliency needs.

2. Performance and scalability

The dictionaries in MySQL were refactored, making them transactional and with improved locking mechanisms. This has resulted in higher performance as well as the ability to easily roll back operations in a safe and performant way. These scalability improvements are designed to work out of the box, provided you are using the InnoDB engine.

3. Security

The static privileges in 5.7 were expanded with dynamic privileges. Roles were added, making it possible to group permissions and then assign roles to users. This is helpful in larger organizations where users are typically representing groups, or, more importantly, where managing all the individuals could be a tedious and error-prone task.

4. Various improvements

On top of these high-visibility topics, MySQL 8.0 also comes with a collection of smaller yet valuable improvements that support the ease of use, flexibility and performance, and more.

These include:

- **The default character set of UTF8MB4 gives Unicode version 9.0 support** — meaning you get Umlauts, Cedils, and C-J-K Language support in your data, plus emojis. MySQL 8.0 is optimized around this character set, giving you all the international characters you need to support global operations.

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- **The Structured Query Language has been greatly enhanced.** If you have trouble writing subqueries, you can rejoice in lateral-derived joins and Common Table Expressions (CTEs). There is a new intersect clause to aid with sets.
- **EXPLAIN ANALYZE is a big boon to query tuning.** EXPLAIN without the ANALYZE gives you the server's estimated analysis of the performance of your query. Adding ANALYZE causes the query to execute and the numbers returned to report the real numbers of the query's performance. Add in INVISIBLE INDEXes, and you can test the efficiency of an index without risking a disastrous rebuild after a delete.

5. MySQL 8.0 is secure and stabilized.

If early cautionary tales have you hesitant about upgrading from 5.7 to 8.0, realize that most of them were unfounded and that others have been addressed. Yes, early versions of MySQL 8.0 caused some problems, but since then, numerous fixes and improvements have been implemented.



Percona software for MySQL 8.0

If you're considering moving to MySQL 8.0, why not consider Percona Software for MySQL 8.0?

Percona software for MySQL 8.0 is an open source, enterprise-grade MySQL alternative for MySQL CE. It offers better scalability and concurrency for demanding workloads, plus:

- **Faster custom bug fixes**
- **Open source features that enable security and compliance without lock-in**
- **Improved database scalability with free monitoring and management tools**

We'll make it easy:

Expert support for your migration to Percona software for MySQL 8.0

Percona experts have the skills and experience to ensure your upgrade goes smoothly.

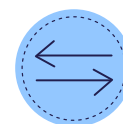
1. Pre-migration assessment

We'll work with you to assess your current setup and future needs to develop a fit-for-you plan for migration. We'll also make sure to identify any potential pitfalls that could cause delays.



2. Migration proof of concept (POC)

We'll provide a detailed overview of the work necessary to migrate you to MySQL 8.0.



3. 24/7 support during migration

Our experts will assist with your unique setup, plugins, and add-ons to ensure your database operations remain consistent, uninterrupted, and reliable. This includes:

- Schema migration
- Data migration
- Performance issues resolution
- High availability and disaster recovery setup
- Extensions setup, errors, and scalability issue resolution



4. Post-migration training

Our training team will provide actionable advice and hands-on exercises to help your team get up to speed – and get the most out of – MySQL 8.0.



5. Post-migration support

Enjoy comprehensive support after you migrate, including coverage for Day 1 and Day 2 operations, database performance and business continuity reviews, health status checks, and more.



[Upgrade to MySQL 8.0 with Percona](#)

To learn more about how Percona can help, and for pricing information, please contact us at **+1-888-316-9775** (USA), **+44 203 608 6727** (Europe), or email us at sales@percona.com.