

# Comparison between MySQL and MariaDB

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MySQL and MariaDB are both popular relational database management systems (RDBMS) that share a common origin. Here's a comparison of the two:

## 1. Origin and Development:

MySQL: Developed by MySQL AB, later acquired by Sun Microsystems, and then by Oracle Corporation. It's one of the most widely used RDBMS.

MariaDB: A fork of MySQL, created by the original developers of MySQL after Oracle's acquisition. It aims to maintain compatibility with MySQL while being community-driven.

## 2. Licensing:

MySQL: Uses the GNU General Public License (GPL) but also offers commercial licenses through Oracle.

MariaDB: Fully open source and community-driven under the GPL.

## 3. Compatibility:

MySQL: Consistent with Oracle's updates and changes. Some newer features and optimizations may be proprietary.

MariaDB: Designed to be a drop-in replacement for MySQL. It maintains compatibility with MySQL, but some newer MariaDB features are not backward-compatible with MySQL.

## 4. Features and Performance:

MySQL: Regular updates with new features, especially in the commercial version. Performance optimizations may differ depending on the version used.

MariaDB: Often includes additional features, storage engines (e.g., Aria, MyRocks), and performance enhancements not available in MySQL.

## 5. Storage Engines:

MySQL: Includes InnoDB (default) and MyISAM, among others.

MariaDB: In addition to InnoDB and MyISAM, it includes Aria, MyRocks, and other storage engines, offering more flexibility.

## 6. Community and Support:

MySQL: Backed by Oracle, with extensive documentation and a large community. Commercial support is available from Oracle.

MariaDB: Supported by the MariaDB Foundation and an active community. It also has commercial support available through MariaDB Corporation.

## 7. Future Development:

MySQL: Development direction is influenced by Oracle's priorities, which may not always align with the community's needs.

MariaDB: Development is community-driven, with a focus on openness and responding to community feedback.

## 8. Ecosystem and Integration:

MySQL: Widely adopted with strong ecosystem support, including numerous integrations, tools, and third-party applications.

MariaDB: Increasingly adopted, with growing support and compatibility with tools and applications designed for MySQL.

## Conclusion:

Both MySQL and MariaDB are robust choices for a relational database management system. The best choice depends on your specific needs and preferences:

Choose MySQL if you prefer a well-established, widely-supported system with commercial backing.

Choose MariaDB if you value an open-source, community-driven project with additional features and storage engine options.

## Comparison Table

Aspect	MySQL	MariaDB
Origin	Developed by MySQL AB, acquired by Oracle Corporation	Forked from MySQL by original developers
Licensing	GNU General Public License (GPL), commercial licenses	Fully open source under GNU General Public License (GPL)

Development	Oracle-driven, commercial and community versions	Community-driven with commercial support from MariaDB Corporation
Compatibility	Compatible with prior versions, Oracle influences future	Drop-in replacement for MySQL, some unique features
Features	Regular updates, some proprietary features	Additional features and storage engines, community-focused
Performance	Optimized for various use cases, proprietary optimizations	Performance enhancements, various storage engines
Storage Engines	InnoDB (default), MyISAM, etc.	InnoDB, MyISAM, Aria, MyRocks, and more
Community and Support	Large community, extensive documentation, Oracle support	Active community, supported by MariaDB Foundation
Future Development	Oracle's priorities influence direction	Community feedback-driven, open development
Ecosystem and Integration	Widely adopted, strong ecosystem, many integrations	Growing adoption, increasing tool and application support