MySQL Router 9 Release Notes

Abstract

This document contains release notes for the changes in MySQL Router 9 through 9.5.0.

For additional MySQL Router documentation, see https://dev.mysql.com/doc/mysql-router/en/.

Updates to these notes occur as new product features are added, so that everybody can follow the development process. If a recent version is listed here that you cannot find on the download page (https://dev.mysql.com/downloads/), the version has not yet been released.

The documentation included in source and binary distributions may not be fully up to date with respect to release note entries because integration of the documentation occurs at release build time. For the most up-to-date release notes, please refer to the online documentation instead.

For legal information, see the Legal Notices.

For help with using MySQL, please visit the MySQL Forums, where you can discuss your issues with other MySQL users.

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Preface and Legal Notices

This document contains release notes for the changes in MySQL Router 9.

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Changes in MySQL Router 9.5.0 (2025-10-21, Innovation Release)



Note

These release notes were created with the assistance of MySQL HeatWave GenAl.

Bugs Fixed

- Removed !SSLv3 from the default cipher list. SSLv3 support is disabled explicitly. The !SSLv3 filter incorrectly removed valid ciphers from the allowed cipher list. (Bug #38205463)
- It was not possible for MySQL Router to retriieve metadata if from a secondary node if it was lagging and had not yet received the router_id from the primary. Errors were returned similar to the following:

```
Error reading router.options from v2_cs_router_options: did not find router entry for router_id, Unable to fetch live group_replication member data from any server in cluster
```

As of this release, if a router_id is not found, MySQL Router proceeds to the next server on the list until it locates valid metadata. (Bug #38132603)

- IPv6 endpoints were logged as ::1:12435 instead of [::1]:12345. IPv6 addresses with ports are now properly escaped. (Bug #38122485)
- Under certain circumstances, restarting MySQL Router could result in an empty state.json file, leading to restart failures. Errors were returned similar to the following:

```
Error parsing file dynamic state file: Parsing JSON failed at offset 0: The document is empty.
```

(Bug #38099912)

• The HTTP plugin misinterpreted the bind_address=* configuration and bound to the loopback address, only. (Bug #38084833)

Changes in MySQL Router 9.2.0 (2025-01-21, Innovation Release)

· Functionality Added or Changed

Bugs Fixed

Functionality Added or Changed

- Added a new close_connection_after_refresh metadata_cache option to control whether
 a connection remains open for future metadata refresh operations. If set to 0 (default), the
 metadata_cache keeps the connection open if the refresh succeeded and if the next refresh is to the
 same MySQL server. Setting it to 1 is similar to previous behavior, in that the connection is closed after
 each metadata refresh operation. (WL #16652)
- The destinations option now supports Unix domain sockets. (WL #16582)
- This release introduces Routing Guidelines, a flexible and unified configuration interface enabling users to customize routing behavior. Routing Guidelines are defined as a JSON document, stored in the metadata schema.

Use the MySQL Shell AdminAPI RoutingGuideline class to interact with these guidelines, and see the MySQL Shell 9.2.0 release notes for additional information. (WL #14119)

Bugs Fixed

- Important Change: MySQL Router no longer supports MySQL Server versions from a newer series. The metadata is checked and discarded for servers from a newer series, a check that executes during bootstrap and during periodic metadata refresh operations. A newer version in the same series is supported. For example, MySQL Router 8.4.4 supports MySQL Server 8.4.5 but not MySQL Server 9.0.0. (Bug #36041256)
- Because building with CMAKE_BUILD_TYPE=Debug disables optimizations, std::vector.resize()
 attempted to initialize every byte before each read from an encrypted socket. Memory usage was
 improved to account for this. (Bug #37385923)
- Accessing the /routes/{name}/connections REST API endpoint while also benchmarking queries through the router could cause the router to unexpectedly halt. (Bug #37251508)
- OpenID Connect authentication stopped functioning for a connection with the following scenario: the default authentication plugin was set to openid_connect, the MySQL Router connection pool was enabled, and the connection was in the pool ready for reuse. (Bug #37190332)
- When stats_updates_frequency was set to an unexpected value, MySQL Router would log a
 warning during each metadata refresh thus clogging the logs. Now the warning is logged just once,
 unless the value changed. (Bug #116951, Bug #37391164)

Changes in MySQL Router 9.1.0 (2024-10-15, Innovation Release)

- Functionality Added or Changed
- Bugs Fixed

Functionality Added or Changed

 Added OpenID Connect support, which is available as of MySQL Enterprise Edition Server 9.1.0. (WL #16466)

Bugs Fixed

 With connection sharing enabled, changing the password of an active connection yielded a vague "Lost connection" error instead of indicating that reauthentication failed. (Bug #36981282)

- Updated <cstring> and <iostream> header usage by adding or removing their inclusion as needed, and annotated the functions utilized from each. (Bug #36946579, Bug #36951336)
- Replaced most uses of std::enable_if<> and std::enable_if_t<> with the requires keyword introduced in C++20, to limit the visibility of methods. This improves the error messages and stack traces. (Bug #36939919)
- On macOS, AddressSanitizer (ASan) discovered a potential issue with connection pooling that could cause Router to unexpectedly halt. (Bug #36935988)
- Bootstrapping against a MySQL account that used the mysql_native_password authentication plugin
 with MySQL Router 9.0 from a standalone (zip or tar.gz) package would exit with an error indicating that
 the plugin was not available. (Bug #36915646)
- Improved the dependency injection mechanism (DIM) to increase performance in a multithreaded environment. DIM is no longer controlled by a single mutex. (Bug #36846616)
- In some cases, the LogFilter would execute when a log message wasn't logged. (Bug #36841009)
- Improved HTTP request handing performance by using the ICU regex implementation instead of std::regex. (Bug #36797250)
- Improved HTTP request handling to better scale for a large number of parallel connections. (Bug #36796808)
- Building with the MSVC "Build Solution" target now excludes building mysqlxmessages_shared, which was already defined as EXCLUDE_FROM_ALL. (Bug #36719728)
- A TLS shutdown was not executed when Read-Write splitting was used and a prepared statement needed to be prepared on the Write node but the current connection was on the Read node. (Bug #36715733)
- Connections in the connection pool were closed without waiting for the server to close the connection which affected the TLS session reuse cache. This affected connection sharing and Read-Write splitting as both let the connection pool close their connections. (Bug #36715372)
- Greatly improved HTTP/2 compatibility for the REST API. (Bug #36697876)
- With Read-Write splitting enabled and after the PRIMARY switched its role to SECONDARY, all write statements would fail with an error indicating that the MySQL server is running in super_read_only mode. Now it drops the client connection like it does without Read-Write splitting. (Bug #114594, Bug #36591958)

Changes in MySQL Router 9.0.1 (2024-07-23, Innovation Release)

This release contains no functional changes and is published to align its version number with that of the MySQL Server 9.0.1 release.

Changes in MySQL Router 9.0.0 (2024-07-01, Innovation Release)



Important

This release is no longer available for download. It was removed due to a dependency on a version of the server which is also no longer available for download. See MySQL 9.0.0 Release Notes. Please upgrade to MySQL Router 9.0.1 instead.

Bugs Fixed

- System variable changes were not propagated when read-write splitting was enabled. (Bug #36674083)
- Current schema changes were not propagated to shared connections when both read-write splitting and connection sharing were enabled. (Bug #36663727)
- Increased the maximum router_id value from 999999 to 4294967295 (2^32-1). This also affects how the internal metadata_cache user name is defined. (Bug #36393211)