MySQL Innovation and Long-Term Support (LTS) versions

Safe Harbor

The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, timing, and pricing of any features or functionality described for Oracle's products may change and remains at the sole discretion of Oracle Corporation.

Statements in this presentation relating to Oracle's future plans, expectations, beliefs, intentions and prospects are "forward-looking statements" and are subject to material risks and uncertainties. A detailed discussion of these factors and other risks that affect our business is contained in Oracle's Securities and Exchange Commission (SEC) filings, including our most recent reports on Form 10-K and Form 10-Q under the heading "Risk Factors." These filings are available on the SEC's website or on Oracle's website at http://www.oracle.com/investor. All information in this presentation is current as of September 2019 and Oracle undertakes no duty to update any statement in light of new information or future events.

MySQL Innovation and Long-Term Support (LTS) versions

The patch releases of MySQL 5.7 and previous releases were focused on bugfix and security patches

That changed in MySQL 8.0 with the continuous delivery model in that patch releases also contained new features

We are now transitioning to a versioning model where you can choose between Innovation and Long-Term Support (LTS) releases.

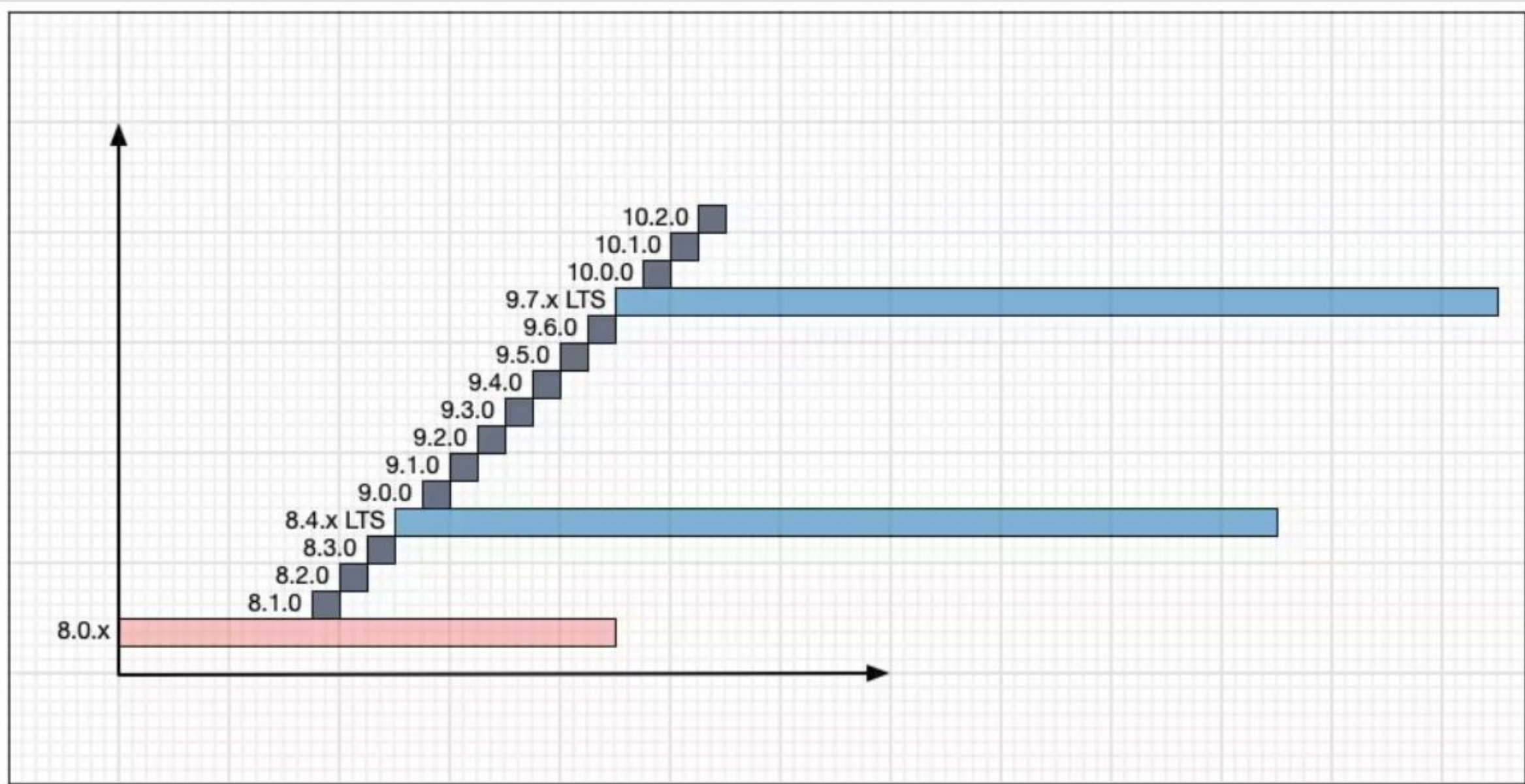Both Innovation and LTS are production-grade quality

MySQL Innovation and Long-Term Support (LTS) versions

MySQL Innovation releases

- If you desire access to the latest features and improvements and enjoy staying on top of the latest technologies.
- These releases are ideal for developers and DBAs working in fast-paced development environments with high levels of automated tests and modern continuous integration techniques for faster upgrade cycles.

MySQL LTS releases

- If your environment requires established behavior.
- These releases contain only necessary fixes, so they reduce the risks associated with changes in the database software's behavior.

Flexibility & Support

- With the new MySQL versioning model, you have the flexibility to select the option that suits your specific application and environment needs.

- Our goal is to ensure that you have an exceptional user experience with both Innovation and LTS releases.

Transitioning into Innovation and LTS releases

- If you want the latest features, improvements, and all bug fixes for your MySQL databases, use the Innovation release track (eg., 8.1.0, 8.2.0, 8.3.0, etc.)

- If you need only bug fixes for your MySQL database, use 8.0.x releases (eg., 8.0.35, 8.0.36, 8.0.37, etc.)

- When 8.4 LTS is released, you can plan, test, and migrate from the 8.0.x bug fix track to the LTS release track (eg., from 8.0.37 to 8.4.1).
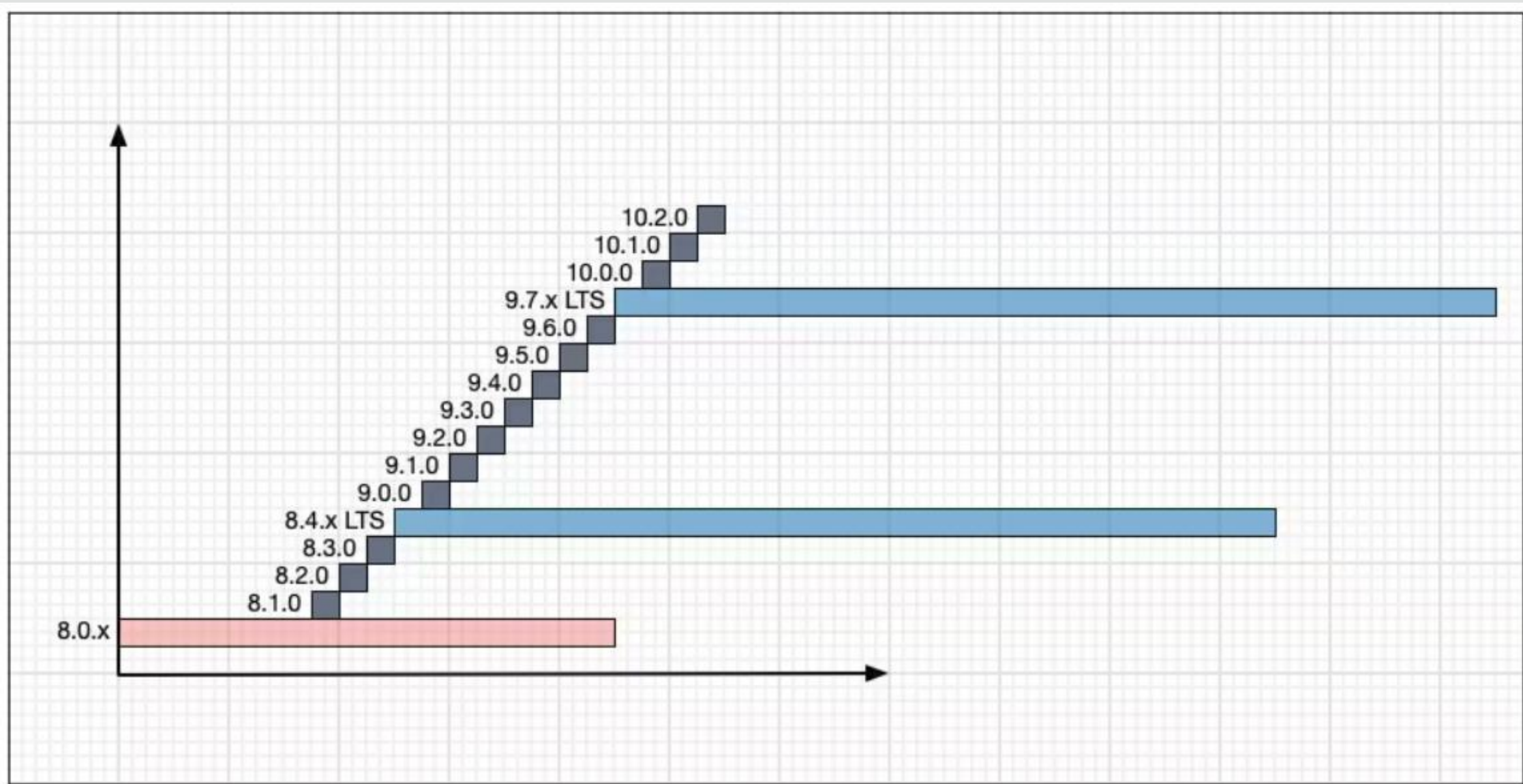
Support Lifecycle

- LTS Releases will follow the Oracle Lifetime Support Policy, which includes 5 years of premier and 3 years of extended support

- Innovation releases will be supported until the next innovation release

- You should plan to update your MySQL databases quarterly accordingly to Oracle Critical Patch Updates (CPU) calendar

MySQL Portfolio & Support Lifecycle

- MySQL Server, MySQL Shell, MySQL Router, MySQL NDB Cluster, MySQL Operator for Kubernetes, with InnoDB ReplicaSet, Cluster and ClusterSet will have Innovation and LTS releases.

- MySQL Connectors will use the latest version, but will be considered Generally Available and will remain compatible with all supported MySQL Server versions.

MySQL Versions Release Cadence

- MySQL 8.0.34+ will become bugfix only release (red)

- Innovation releases (grey) will likely happen quarterly

- About every 2 years a new Long Term Support version will be released (blue).

- An exception is the 8.4 LTS release which will happen well before EOL of 8.0

Deprecation & Removal of Features

- Deprecated features can be removed in innovation releases

- Deprecation warnings are given in prior releases to give time for users to adopt

- Note that there are no removals within an LTS release. Features can be removed (& added) only in the first LTS release (e.g., 8.4.0 LTS) but not later.

Behavior Changes

- Apart from new features in Innovation releases, behavior changes are also to be expected as code gets refactored or when MySQL is modified to behave more in line with SQL Standards (this will not happen within an LTS release).

- Behavior changes can have a big impact, especially when dealing with anything application related, such as SQL Syntax, new reserved words, query execution, or even query performance. Behavior changes might require application changes which can be a considerable effort for our users to migrate.

- We intend to provide the necessary tools and configuration settings to make it possible and easy to upgrade and downgrade between versions.

Upgrading & Downgrading within an LTS release

- Within an LTS release, functionality remains the same and data format does not change. Therefore:

- In-place upgrades and downgrades will be possible. This is an improvement compared to MySQL 8.0.x releases (< 8.0.34) where downgrades were not possible and upgrade by skipping versions were not recommended.

- InnoDB CLONE will be supported within an LTS release, both for upgrading and downgrading.

Upgrading & Downgrading from one LTS to another LTS

- It will be possible to migrate from one LTS release to the next LTS release without having to perform several intermediate steps of upgrading Innovation releases.

- Upgrading will be possible through in-place upgrades, MySQL Shell Dump & Load and MySQL asynchronous replication.

- Downgrades will be possible through MySQL Shell Dump & Load and MySQL replication for the sole purpose of rolling back an in-progress upgrade, more below.

Upgrading & Downgrading between Innovation releases

- In-place upgrades from one Innovation or LTS release to a future Innovation release will be supported, up until the next LTS release. Replication and dump & load will also work.

- Downgrading will require a logical dump & load. This is similar to MySQL 8.0.x (< 8.0.34).

Upgrading & Downgrading with MySQL asynchronous replication

- It will be possible to replicate from an LTS or Innovation release to

- the next LTS release

- any future Innovation release up until the next LTS release (LTS 8.4 → LTS 9.7, but not LTS 8.4 → LTS 10.7)

- MySQL asynchronous replication will be able to replicate to previous versions (with caveats)

Copyright © 2024 Oracle and/or its affiliates

Upgrade Support Matrix

	In-Place	CLONE	Async replication	Dump/Load
LTS 8.4 → LTS 9.7	✓	✗	✓	✓
LTS 8.4.11 → LTS 8.4.20	✓	✓	✓	✓
Innovation 8.1 → 8.2	✓	✗	✓	✓
Innovation 8.1 → 8.3	✓	✗	✓	✓
Innovation 9.1 → LTS 9.7	✓	✗	✓	✓
LTS 8.4 → LTS 10.7	✗	✗	✗	✗

Downgrade Support Matrix

	In-Place	CLONE	Async replication	Dump/Load
LTS 8.4.20 → 8.4.11	✓	✓	✓	✓
LTS 9.7 → LTS 8.4	✗	✗	✓★	✓★
LTS 9.7 → Innovation 9.6	✗	✗	✓★	✓★
LTS 9.7 → Innovation 9.5	✗	✗	✓★	✓★

(★) indicates support is limited for rollback purposes only.

Thank you!

- You can download the latest MySQL releases at mysql.com/downloads or use Oracle Software Delivery Cloud on http://edelivery.oracle.com/ to download MySQL Enterprise binaries.

- For detailed information about each release, including new features, improvements, bug fixes, and possible breaking changes, check the MySQL Release Notes.

- As always, thank you for using MySQL!

References

- [Introducing MySQL Innovation and Long-Term Support (LTS) versions (oracle.com)](#)
- [Oracle Critical Patch Updates (CPU) calendar](#)
- [Oracle Lifetime Support Policy](#)