MySQL Development Cycle

Abstract

This document describes the MySQL development cycle.

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This document explains the MySQL Server development cycle. The purpose of the document is to facilitate community involvement, for example by providing feedback on pre-releases and making contributions to upcoming releases, through explaining how MySQL Server versions are developed.

1. Feature Development

Feature development happens as follows:

- A MySQL feature is specified in a Worklog entry.
- The Worklog entry undergoes specification, design, architecture and QA reviews (but not necessarily in a strict sequence).
- The MySQL feature is implemented in a feature tree.
- Feature trees are created from and kept in sync with the MySQL main development tree, which is called TRUNK.
- When a feature has been implemented, it undergoes a code review.
- When the code review is done, the feature tree is handed over to QA (quality assurance).
- QA tests the feature, the implementer fixes bugs, and QA eventually "signs off" the feature.
- Once the feature is signed off, it is merged into TRUNK.

This way, TRUNK will accumulate features and bug fixes over time. Extensive regression testing is performed on TRUNK all the time, keeping TRUNK close to Release Candidate (RC) quality at all times.

2. Lab Releases

A Lab release is a **preview** of one or more features under development which have normally not been integrated into TRUNK yet. Lab release features are not part of the last DMR (development milestone release). Lab releases are created when the MySQL community voices interest in evaluating early work, and they are **snapshots** of the feature tree at a given point in time. Lab releases can have beta quality, or they can be available only on a limited set of platforms, or documentation can not be available. Finally, there is no guarantee that the features in a lab release will appear in future DMR or GA releases. Lab releases can be found at labs.mysql.com.

3. Development Milestone Releases

A development milestone release (DMR) is produced from TRUNK every 3-6 months and includes everything that is new in TRUNK since the previous DMR. The DMR is released with up-to-date documentation for all new features. The goal is to produce DMRs with RC quality and for all supported platforms.

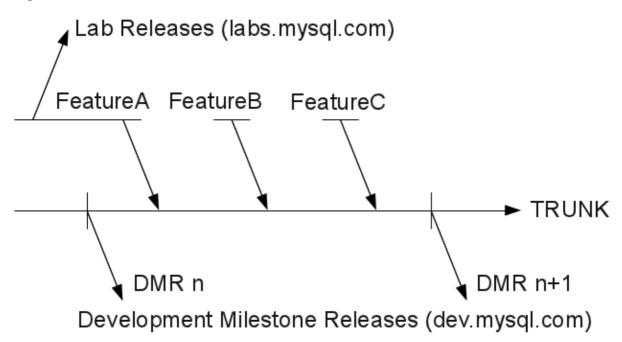
The purpose of a DMR is to "release often", as a service for early adopters, and to collect feedback from customers and users. That feedback is used to improve the next DMR. DMRs can be found on the MySQL Developer Zone.

Development milestone releases are produced as follows:

- A release manager sets a DMR cut-off date for new features.
- The DMR will include all features that make it to TRUNK before the cut-off date.
- TRUNK is frozen for a short period of time, while some additional testing and evaluation is performed by QA (quality assurance).
- · QA signs off TRUNK.

- The DMR is cloned off and put in a separate tree, and TRUNK is opened up again for normal work.
- · QA tests the cloned-off DMR; bugs found in the process are fixed, and eventually QA approves the DMR.
- The DMR is released and announced.

Figure 1. Milestone releases



4. Generally Availability (GA) Releases

GA releases are releases recommended for production systems. The overall goal is to produce a new GA release every 18 to 24 months. GA releases can be found on the MySQL Developer Zone.

GA releases are produced as follows:

- A GA release is based on a DMR.
- The selected DMR undergoes additional testing and bug fixing; then a first RC (release candidate) is produced and made public.
- The release candidate undergoes evaluation by customers and users; this can cause a need for more RC cycles until GA quality will be reached.
- The GA release is released and announced.

Figure 2. GA Releases

