

How mobile release trains drive speed and quality for the world's biggest applications

About the mobile release train

At the core of every mobile team's success is speed of delivery. Using the right approach, your teams can achieve this by moving away from a slow release model and by creating faster mobile cycles – while maintaining release confidence and high quality apps for your users.

Beyond adopting the right set of CI/CD tools, the mobile release train model is a great way to accelerate and help visualize your development process, while ensuring everyone is on the same page. This approach will help you release more consistently, and allows distributed teams to work more aligned around app development.

This guide will help you understand the concept behind the mobile release train model. It looks into benefits and implementation, and why having a robust CI can be an important part of delivering applications at speed and scale – without compromising on build quality.

“One of the biggest indicators is that a release is like a very special occasion. If you take a look at the version history of most apps today, you’ll notice that updates come in slow, lethargic releases every few months. Contrast that to the top apps in every vertical and you’ll find that those top teams are instead releasing every 1-2 weeks.”

- Lyft PM David
Dryjanski
at ‘Fast, Data Driven Growth on
Native Mobile’

Purpose and benefits

- Plan releases in advance to achieve a better time-to-market and release new quality app versions for your customers more consistently, without last-minute additions
- Align your distributed teams around app development by better managing their schedules, simplifying complex release steps and introducing better transparency
- Release apps to different app stores with ease and support a large number of locales by allowing the train to proceed only after all new resources have been localized
- Get visual feedback of the status of builds, streamline validation steps and minimize risks with staged rollouts, leading to improved code quality, tests and better functionality

The mobile release train explained in 5 easy steps

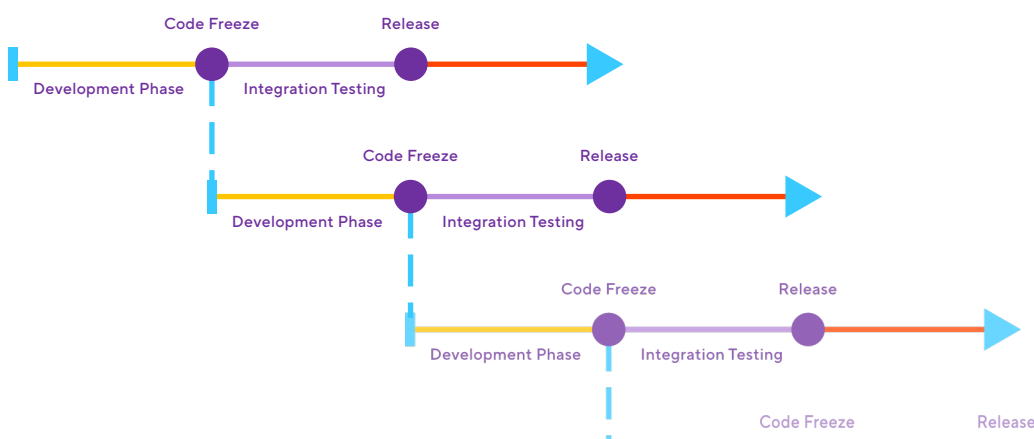
First, define the time slots for each development stage and how much time you want to spend with integration testing, beta testing and the rollout stages

During the development phase, your teams have the time to review, test and merge the features to the main branch that should be part of the train

When the content for a release is agreed and ready, there will be a final integration testing phase

In this phase, team members should check whether new features and fixes work as intended. Bugs will be fixed, and merged back if necessary

A code freeze can mark the close of a development cycle and the start of a new one. Contributing teams can initiate a new sprint to continue with the development until release



Quick implementation guide

1

Adopt a fixed release train schedule

Get your teams and organization onboard and make speed of delivery a priority. You don't have to ship extra features with every single update – bug fixes and MVPs are well worth the efforts. In the long term, this will help your teams develop flexibility - through pushing out releases more consistently - and make you react to the market quicker while learning from your users.

2

Identify a release manager

A dedicated release manager who onboards your teams can help streamline your teams' workflow and highlight benefits of this practice. Weekly release standups can serve to inform your teams about ongoing releases and problems that occur on the current live version. Once a code freeze happens, only the release manager has to take care of the release process, while all your other teams can continue with the rest of the development.

3

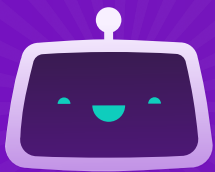
Iterate and improve development

The release train will help to keep your teams synchronized, leading to more optimized development and release cycles. This allows you to maximize value per each cycle and give everyone a sense of predictability. As a result, design and data analysis teams can estimate when to deliver specifications for feature development; product managers can better schedule experiments and product launches; and engineering teams can aim for certain code freeze dates.

Why CI is an important part of a mobile release train

Releasing mobile apps without the right tooling can mean a lengthy and complex submission process for your teams. Having an **easy-to-use CI** in place can help **automate the development process**, save time and make your teams **deliver applications more consistently** to app stores.

Once you have CI in place, build trains can **accelerate your release cycles**, and help track the status of your periodic releases. In the background, CI can ensure that your main branch is always deployable and release builds are updated to the latest localized translations, while other **repetitive tasks are automated**.



Save time, money, and developer frustration with fast, flexible, and scalable mobile CI/CD that just works. [Book a demo](#) and schedule a call with our teams and join the most efficient mobile engineering organizations building on Bitrise today.

Why Bitrise is the best CI to use in this context

Mobile teams on Bitrise release **40% more often**

Bitrise is the world's most popular mobile **CI/CD platform** – built by mobile engineers and used by more than **100 000 developers** and **thousands of organizations** worldwide.

Bitrise automates, monitors and improves your app development workflows to help your teams **spend more time with planning and development**, and less with troubleshooting.

A choice of stacks - Run builds consistently via fast, regularly maintained virtual machine images. Get rid of hardware maintenance costs, extend your runway and maximize profitability.

Simplified setup and maintenance - Tap into a library of hundreds of verified steps and integrations to connect the services you use and to build better quality apps, faster.

Full mobile stack coverage - From native to cross-platform, we have you covered. Release with confidence whether it's Android, iOS, React Native, Swift, Flutter or other mobile builds.

Stability and flexibility - Customize your machine per workflow and access our Gen2 infrastructure for extra speed – without sacrificing on parallelised build performance and security.

Trusted by the world's most sophisticated mobile teams

moz://a

 Expedia®

T O N A L

ibotta®

 TransferWise

duolingo

traveloka 

GET
YOUR
GUIDE

PagerDuty

:DeNA

COMPASS

Virgin
mobile

 bitrise

Made with ♥ in
Budapest, London, Boston
and San Francisco