



CI/CD-Intro and benefits

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What's CI/CD?

- Continuous integration (CI) and continuous delivery (CD) are the processes that are used to build, package, and deploy your application. Basically, it lays out some practices to follow in order for the code you write to more quickly and safely get to your users and ultimately generate value.
- Continuous Integration (CI) is a development practice that helps ensure that software components work together. CI allows you to continuously integrate code into a single shared and easy to access repository.
- Continuous delivery (CD) is the ability to deploy your integrated code into production without the need of human intervention. CD allows you to take the code stored in the repository and continuously delivery it to production.

CI/CD Piepline

A CI/CD pipeline workflow usually consists of the following discrete steps:

- **Phase 1: Commit**

When developers complete a change, they commit the change to the repository.

- **Phase 2: Build**

Source code from the repository is integrated into a build.

- **Phase 3: Automate tests**

Automated tests are run against the build. Test automation is an essential element of any CI/CD pipeline.

- **Phase 4: Deploy**

The built version is delivered to production.

