CodingPilot

#Devops

What is CI/CD

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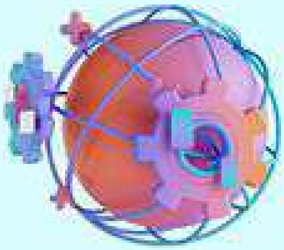
CodingPilot
By FOEFOX

Art by
@wakhidafandi43



What is CI/CD:

CI and **CD** stand for **continuous integration** and **continuous delivery** or **continuous deployment**

But, What is this ?

Continuous integration:

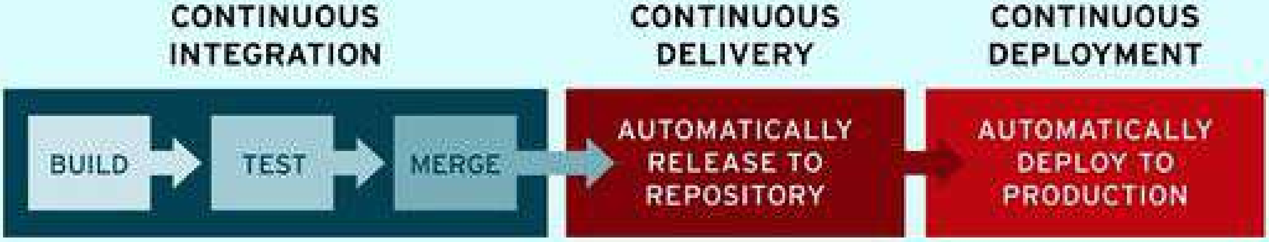
Continuous integration is a DevOps software development practice where developers regularly merge their code changes into a central repository, after which automated builds and tests are run. Continuous integration most often refers to the build or integration stage of the software release process and entails both an automation component (e.g. a CI or build service) and a cultural component (e.g. learning to integrate frequently). The key goals of continuous integration are to find and address bugs quicker, improve software quality, and reduce the time it takes to validate and release new software updates.

Continuous delivery:

Continuous delivery is a software development practice where code changes are automatically prepared for a release to production. A pillar of **modern application development**, continuous delivery expands upon continuous integration by deploying all code changes to a testing environment and/or a production environment after the build stage. When properly implemented, developers will always have a deployment-ready build artifact that has passed through a standardized test process.

CI vs CD

With **Continuous delivery**, every code change is built, tested, and then pushed to a non-production testing or staging environment. There can be multiple, parallel test stages before a production deployment. The difference between continuous delivery and continuous deployment is the presence of a manual approval to update to production. With continuous deployment, production happens automatically without explicit approval.



What are some common CI/CD tools?

- Jenkins
- GitLab
- Travis