

CI/CD



**Utilize Automation's Amazing Powers
To Save Time and Money!**

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What is CI/CD ?

- ▶ Continuous Integration and Continuous Delivery are abbreviated as CI/CD. enables businesses to efficiently and swiftly ship software. In addition to continuously releasing code into production and assuring an ongoing flow of new features and bug fixes via the most effective delivery method, CI/CD provides an efficient procedure for bringing goods to market more quickly than ever before.



Continuous Integration (CI)

- ▶ Developers that practice continuous integration typically add new versions of their code to a common repository.
- ▶ Through an automated procedure, several engineers can contribute software parts to the same project without worrying about integration issues.
- ▶ Every time a software change is added to the repository using CI, automatic testing is performed.



What is CD?

- ▶ Continuous Delivery (CD) can also refer to Continuous Deployment. Both require taking the constantly integrated code and making it capable of deployment to a QA or production environment. The procedure is advanced by continuous deployment, which carries out the actual deployment to an environment.



CI/CD Benefits

- Obtain Revenue

- Greater production frequency and speed Deployments guarantee more rapid releases. There will be a shorter time to market if manual checks are removed before deployment.

- Safeguard Revenue

- A serious issue or deploy-related crash is less likely to cause disruption when a smoke test is automated. Automated rollback in response to a task failure denotes a quick transition from the production to functioning state.



CI/CD Benefits (Cont.)

- Avoid Different Cost

- Infrastructure creation is automated, resulting in quicker deployment and reduced human error. Less defects in the production environment and less testing time are guaranteed by catching unit test failure. Finding security flaws helps to prevent embarrassing security assaults in the future.

- Reduce Cost

- Automation reduces wasteful expenditures on underutilized resources by preventing infrastructure cleanup. It takes less time to fix problems with new developer code when compilation errors are caught after merging.



CI/CD Benefits (Cont.)

- Reducing non-critical faults in the pipeline

It is now abundantly evident that CI/CD saves time and money, allowing developers to focus on tasks they otherwise wouldn't have time for, including going back to update earlier code and make it cleaner and more effective. DevOps and CI/CD have changed the game for teams by allowing engineers to work on non-critical issues in addition to the backlog.

