



Agenda

Fundamentals and Benefits of Continuous Integration/Continuous Delivery & Deployment to Achieve, Build, and Deploy Automation for Our Products.

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CI/CD

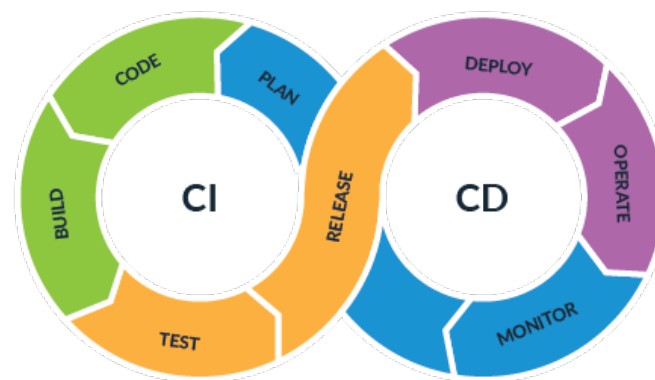
A BETTER WAY TO BUILD
AND SHIP OUR PRODUCTS



Objectives of CI/CD

One of the biggest reasons to adopt CI/CD is to greatly speed up and immensely improve the overall SDLC, greatly enhance code quality and reliability, through applicable use of automation techniques best practices which will ultimately increase revenue for our organization.

The overall benefit of CI/CD is to achieve build and deploy automation within our company's products lifecycle and entrench a fast-to-market culture in the system



Continuous Integration

The practice of merging all developers' working copies to a shared mainline several times a day to avoid conflicts in the code in the future. It's the first step towards ensuring that we have a high quality, deployable artifact.

Some of the steps in this stage include: compiling, testing, running static analysis, checking for vulnerabilities in the our dependencies and storing the code artifacts.

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Continuous Delivery

This is the process by which verified changes in codebase or system architecture are deployed to production as soon as they are ready and without human input.

Some steps in this stage include: setting up infrastructure, provisioning servers, copying files, smoke testing, promoting to production and even rolling back a change if something did not look right.

Benefits of CI/CD to our Organisation

- **Automated Smoke Tests:** This would protect our revenue by reducing downtime caused by deploy-related crash or bugs.
- **Catch Unit Test Failures:** Having less bug in our live app and spending less time doing manual testing would help us to avoid cost.
- **Faster and More Frequent Production Deployment:** We would get more revenue by shipping value generating features more frequently to the customers, this would also help us to get feedback early and stay ahead.
- **Detect Security Vulnerabilities:** This would enable us to easily detect serious security flaws that would be embarrassing if it had made it to the public. This would save us money trying to win back the customers' trust and rebuilding our image.
- **Deploy to Production Without Manual Checks:** Less time to market would help us to increase our revenue.



Summary

Instead of working in isolation, we will share our builds amongst the entire team. We'd collaborate to identify critical bugs, ensuring that bad code doesn't make it to production. Thus CI/CD implementation will accelerate our commercial development by providing high-quality releases that contain fewer errors and bugs.

THANK YOU