CI/CD

CI/CD (Continuous Integration/Continuous Delivery)

What is CICD?



CI/CD stand for continuous integration and continuous delivery



CI/CD is a software development practice that involves continuous integration of code changes into a shared repository, automated testing, and continuous delivery of new software releases to production.

Continuous Integration (CI)

Continuous Integration is an automated process that allows
Software developers integrate code changes into a shared
repository through daily activities with confidence and without conflicts.

Continuous Delivery (CD)

refers to the practice of automatically deploying the code changes that pass the build and test processes to production. This results in the continuous delivery of new software releases to end-users, with minimal manual intervention.

CI/CD benefits



Improved software quality

CI/CD encourages frequent integration and testing, which helps catch bugs and errors early in the development process, leading to better software quality.



Faster time-to-market

CI/CD enables faster delivery of software releases to production, which helps companies stay ahead of the competition and meet customer demands.



Increased collaboration

CI/CD encourages collaboration among development, testing, and operations teams, leading to better communication and a more efficient development process.



Reduced risk

Automated testing and deployment reduce the risk of human error and ensure that software releases are consistent and reliable.



Cost savings

CI/CD can help reduce the cost of software development by automating repetitive tasks and improving the efficiency of the development process.



Continuous feedback

With CI/CD, developers receive continuous feedback on their code changes, which helps them improve their skills and make better decisions.

How does CI/CD Avoid costs?

Automate Infrastructure Creation

Less human error

Faster deployments

Catch Unit Test Failures

Reduce bugs in production

Reduce testing time

Detect security vulnerability

How does CI/CD Increase Revenue?

Frequent production deployments

New value features released more quickly

Deploy to production automatically

Less time to market

Automated smoke tests

Reduce downtime from a deploy-related crash

Automated rollback while deployment failure

Quick undo to return the products to the