CI/CD

GIVES VALUES TO SOFTWARE CODES



WHAT IS CI/CD

Continuous integration and continuous deployment is a paradigm that is focused on the processes involved in developing to deployment of a software. When both are combined together we get **continuous delivery**. Although CI/CD are entirely independent, the concept helps software developers, operation teams and business managers make decisions.

CI/CD Fundamentals

Continuous Integration (CI) is the practice of merging copies of developers code to a shared mainline several times a day while Continuous Deployment (CD) is a software engineering approach in which value is delivered frequently through automated deployments. Meanwhile in CI/CD, our True North is Continuous Delivery.

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110011
010101

Build Test Analyze Deploy Verify Promote

Revert

Benefits Of CI/CD

- Less bugs in production and less time in testing which helps avoid cost
- Less developer time on issues from new developer code to reduce cost.
- Prevent embarrassing or costly security holes
- Less human error, Faster deployments
- Less infrastructure costs from unused resources
- Less time to market
- Reduced downtime from a deploy-related crash or major bug
- Quick undo to return production to working state, which will protect our revenue



CI/CD Best Practices

- Fail Fast
- Measure Quality
- Only Road To Production
- Maximum Automation
- Config in Code

