

Fundamentals & Benefits of CI/CD

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CI/CD



- Continuous Delivery: software engineering teams produce software in short cycles.
- Continuous Integration: practice of merging software developers work frequently.
- Continuous Deployment: software engineering approach in which frequent automated deployments.

Benefits of CI/CD

- Quicker Release: releasing new features with CI/CD is faster.
- Continuous Testing: it allows developers to test code as they put them out, enabling them to discover bugs quickly and apply necessary changes.
- Maximum Automation: CI/CD allows for automation of the deployment process therefore reducing the risk of human errors.
- Easy rollbacks: with CI/CD, you are able to rollback changes quickly. If a change in code breaks the application, you can easily return the application to its previous state.

Project Benefits

- Project cost reduces by 15%: the Udapeople team fixes issues before reaching deployment stage, unused infrastructure is also identified and released
- Code quality increases by 30%: instead of working in isolation, our developers work in unison with the team which results in critical bug identification ensuring bad code does not make it to production
- Release cycles accelerated by 25%: with CI/CD, the Udapeople team can release software to production multiple times resulting in quicker release of updates/features