

BENEFIT OF CI/CD TO UDAPEOPLE

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OUTLINE

- Introduction to CI/CD
- Why CI/CD
- Benefits of CI/CD to Udapeople
- Expectations

Introduction

CI/CD is the combination of continuous integration (CI) with continuous deployment to get continuous deployment (CD). The continuous integration allows multiple developers to merge their code in one centralize repository while continuous deployment is the process where features are delivered through automated deployment. In CI/CD pipeline the output of one stage is the input of another stage

Why CI/CD?

- CI/CD catch compile errors after merge, less time to fix bugs from new code
- Less bugs in production and less time in testing as unit test failures are detected automatically
- Security vulnerabilities are detected
- Less error in deployment and faster time of deployment since everything is automated
- Automated smoke test reduces downtime from deployment related crash
- Automated rollback on job failure quickly restore production to working state

Benefits of CI/CD to Udapeople

- Less development time reduces cost
- Cost is reduced due to less infrastructure costs from unused resources
- Revenue will be increased as a result of fast deployment of features and less time to market
- Revenue is protected by reducing downtime from a deploy-related crash
- It will allow Udapeople to get metric such as the overall delivery time of each feature, rollback rate, time to failure and production uptime
- Udapeople engineers will have more time to develop features
- More confidence of the code by non developers of the team

Expectations

- It is expected that once we Udapeople adopt CI/CD all server deployment and configuration will be automated no more tinkering with the servers manually.
- Unit tests will be automated therefore no more neglect of unit tests.
- All broken code will be detected automatically
- We will reduce cost, avoid cost, increase revenue and protect revenue.