

Introduction to CI/CD

CI/CD

CI - Continuous Integration

CD - Continuous Delivery and Continuous Deployment

DevOps best practice for delivering software releases

CI/CD

Small, frequent, incremental code changes merged to central repository

Improves team communication with continuous feedback and transparency

Automated builds and testing

Issues detected and fixed faster, less risks

Improvements released... continuously

CI/CD pipeline

Series of steps to take to deliver software
Analogous to Integration/Testing/Deployment phases of SDLC

Stages of the CI/CD pipeline

Source – New code pushed to central repository

Build – Code is merged and made ready for use

Test – Updated code is tested

Deliver/Release – New release of application delivered for deployment

Deploy – Deployed to end users

CI/CD pipeline

Each DevOps team will set up their own CI/CD pipeline

CI/CD tools include

AWS CodePipeline

Google CloudBuild

Azure Pipelines

Jenkins

GitLab CI

GitHub Actions