

UdaPeople



Fundamentals and Benefits of Continuous Integration / Continuous Deployment - CI/CD

What is CI/CD

- Continuous Integration (CI) - The practise of merging the code from several developers into one shared code-base frequently.
- Continuous Deployment (CD) - The practise of delivering the code to production environment automatically

CI/CD pipelines enforces automation in building, testing and deploying applications

Benefits – Reduce cost

- Catch integration errors on merge
 - Less developer time spent on issues when code is merged from several developers or teams
- Automated Infrastructure Cleanup
 - Cleanup unused resources to save costs on infrastructure
- Faster deployments
 - Cleanup unused costly resources faster

Benefits – Avoid cost

- Detect security vulnerabilities automatically
 - Fix vulnerabilities before it has been exploited and caused costly consequences
- Smaller pieces of code are tested more frequently
 - If the issue appears, it can be dealt with much faster, avoiding the risks in the future

Benefits – Increase Revenue

- Automated deployments to production
 - Less time to market, can deliver fixes faster
- More frequent deployments
 - Deliver value generating features to production faster