

# CI/CD for UDAPEOPLE

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# Why CI/CD?

## Benefits:

1. Reduces Cost by no or minimal interference of human from testing to deployment
2. Reduce new feature deployment time in production drastically.
3. Simplify rollback
4. Improves MTTR (Mean Time to Resolution)
5. Rapid or Continuous Feedback from build to deployment phase.
6. Better teams

## Benefits in details:

1. CI/CD pipelines promotes automation of manual tasks such as build creation, build test, security checks, deploy and configure infra and finally promote to production. All these activities require manual efforts, hence by adopting this it can greatly reduce cost and time.
2. Release new feature in market at high speed: It speeds up the releases of changes / new features to market at very high speed. With the help of CI/CD, releases can be done not just weekly, daily and even hourly. Hence once, testing is done , deployment can be done instantly.
3. Simplify rollback: In case production change is not successful then it can be rollback more effectively and efficiently without manual efforts. This saves the organization from embarrassment from users and maintains trust.

## Benefits in Details Continue:

4. Improves Mean Time to Resolution(MTTR): With the help of CI/CD, teams can see issues quickly and fix them asap as compare to manual process. Instead of catching fault or bug till change go live, CI/CD pipeline detects it early and save our time and cost over last minute detection. Because of early detection, it gives ample time to fix it.
5. Continuous Feedback and Monitoring Metrics: CI\CD pipelines are visible to everyone. Each stage can be monitored and instant feedback can be provided. It will improve the overall quality. Even the historic data can be studied which further help in understanding which stages need max improvement.
6. Better Communication and Collaboration: It build collaborative culture and makes CI/CD successful. It involves each one and breaks silos. Removes the burden of bug fix or deployment from individual's shoulders and increase participation of each one to resolved bugs or in deployment etc.