

Overview

Continuous integration (CI):

The practice that involves developers making small changes and checks to their code. Due to the scale of requirements and the number of steps involved, this process is automated to ensure that teams can build, test, and package their applications in a reliable and repeatable way.

• Continuous delivery (CD):

The automated delivery of completed code to environments like testing and development. CD provides an automated and consistent way for code to be delivered to these environments.

Benefit of CI/CD

- 1. <u>Automate Infrastructure Creation and Cleanup:</u>
 Eliminating human errors and avoid unnecessary cost of unused or invalid infrastructure
- 2. <u>Compile errors will be discovered faster:</u>
 As soon as any developers commit a line of code, compilation errors will be discovered immediately.
- 3. <u>Faster to production:</u>
 By automate the pipeline to production, this can help us deploy features as soon as created which will help increase revenue.

Benefit of CI/CD

4. Automate smoke test:

Automate smoke test after deployment and automatic rollback in case of failure which will decrease downtime and reduce cost

5. Automate Rollback Triggered by Job Failure:

Automate the process of rolling back and cleaning any infrastructure left which would help in reducing cost and lower down time.