Methodology and benefits of CI/CD

What is CI/CD?

CI/CD are continuous integration and continuous delivery. Introduces ongoing automation and continuous monitoring throughout the lifecycle of the application for quick and efficient deployment.

CI (Continuous Integration)

Continuous integration (CI) helps developers merge their code changes back to a shared mainline several times a day. Everything related to the code fits here.

CD (Continuous delivery)

Continuous delivery or continuous deployment (CD) mean automating the release of that validated code to a repository and automating releasing an app to production. Continuous delivery aims to have an artifact that is always ready for deployment to a production environment.

CI/CD Benefits

Reduce cost:

Catch compile errors after Merge so less developer time on issues from new developer code, Automate infrastructure cleanup so less infrastructure costs from unused resources.

Avoid cost:

Catch unit test failures so less bugs in production and less time in testing, Detect security vulnerabilities so prevent embarrassing or costly security holes.

CI/CD Benefits (Cont.)

Increase revenue:

Faster and more frequent production deployments so new value-generating features released more quickly, Deploy to production without manual checks so less time to market.

Protect revenue:

Automated smoke tests so reduced downtime from a deployrelated crash or major bug, Automated rollback triggered by job failure so quick undo to return production to working state.