CI/CD

FUNDAMENTALS AND BENEFITS OF CI/CD

Continuous Integration

The practice of merging all codes of the developments team to shared mainline several times a day. So, this step related to the codes only.

Steps in this process are compiling, testing, run unit tests and check vulnerabilities.

Continuous Development

This process responsible for deploying artifacts on the production as soon as its successfully pass through different continuous integration processes.

Steps in this process are Creating infrastructure, Provisioning servers, Copying files, Promoting to production, Smoke Testing (aka Verify) and Rollbacks.

Benefits of CI/CD

o Find error due to merging codes:

 Less developer time on issues from new developer code so it will reduce the Cost.

o Detect vulnerabilities in the codes:

 Prevent embarrassing or costly security holes so it will avoid Cost.

o Automate Infrastructure Creation:

 Less human error, Faster deployments so it will avoid Cost.

Benefits of CI/CD

o Faster and More Frequent Production Deployments:

New value-generating features released more quickly so it will increase Revenue.

o Deploy to Production Without Manual Checks:

Less time to market so it increase Revenue.

o Automated Smoke Tests:

Reduced downtime from a deploy-related crash or major bug so protect Revenue.

o Automated Rollback Triggered by Job Failure:

Quick undo the recent Changes to return production to working state so it protect Revenue.