Continuous Delivery

What is Continuous Integration, Continuous Deployment and Continuous Delivery?

Continuous Integration(CI)

The practice of merging all developers' working copies to a shared mainline several times a day.

Continuous Deployment(CD)

A software engineering approach in which the value is delivered frequently through automated deployments.

Continuous Delivery

An engineering practice in which teams produce and release value in short cycles.

Continuous Integration(CI) + Continuous Deployment(CD) = Continuous Delivery

Benefits of CI/CD

- Less developer time on issues from new developer code(Reduce Cost)
- Less infrastructure costs from unused resources(Reduce Cost)
- Less bugs in production and less time in testing(Avoid Cost)
- Prevent embarrassing or costly security holes(Avoid Cost)
- Less human error, faster deployments(Avoid Cost)
- New value-generating features released more quickly(Increase Revenue)
- Less time to market(Increase Revenue)
- Reduced downtime from a deploy-related crash or major bug(Protect Revenue)
- > Quick undo to return production to working state(Protect Revenue)

CI/CD Pipeline

CI/CD pipeline



8 Principles of Continuous Delivery

- Repeatable Reliable Process
- Automate Everything
- Version Control Everything
- Bring the Pain Forward
- Build-in Quality
- "Done" Means Released
- > Everyone is Responsible
- Continuous Improvement