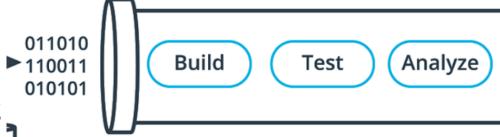
Ci cd

Automate build and ship products process

Continuous Integration

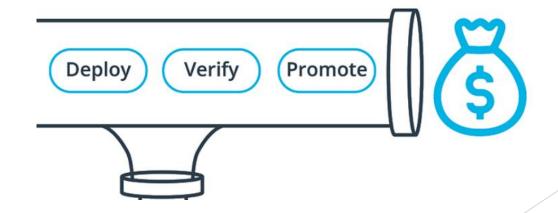
► The practice of merging all developers' working copies to a shared mainline several times a day. It's the process of "Making". Everything related to the code fits here, and it all culminates in the ultimate goal of CI: a high quality, deployable artifact! Some common CI-related phases might include:

- Compile
- Unit Test
- Static Analysis
- Dependency vulnerability testing
- Store artifact

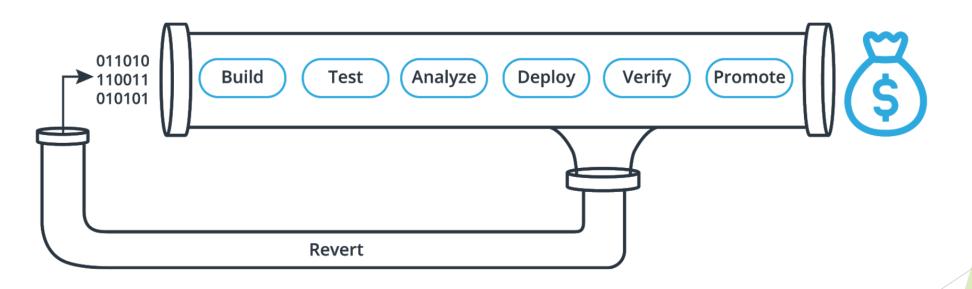


Continuous Deployment

- A software engineering approach in which the value is delivered frequently through automated deployments. Everything related to deploying the artifact fits here. It's the process of "Moving" the artifact from the shelf to the spotlight. Some common CD-related phases might include:
- Creating infrastructure
- Provisioning servers
- Copying files
- Promoting to production
- Smoke Testing (aka Verify)
- Rollbacks



The CI/CD Pipeline



Benefits of CI/CD

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