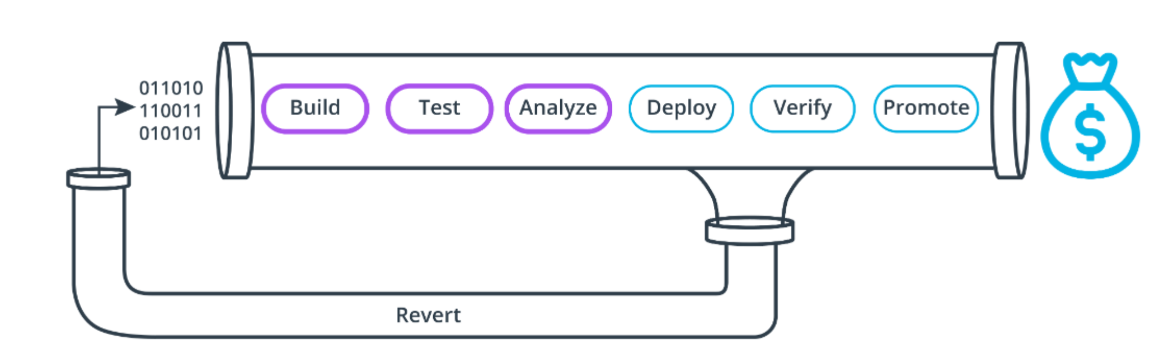
CI/CD

A better way to build your products

Continuous Integration

Continuous Integration is the practice of automating the integration of code changes from multiple contributors into a single software project



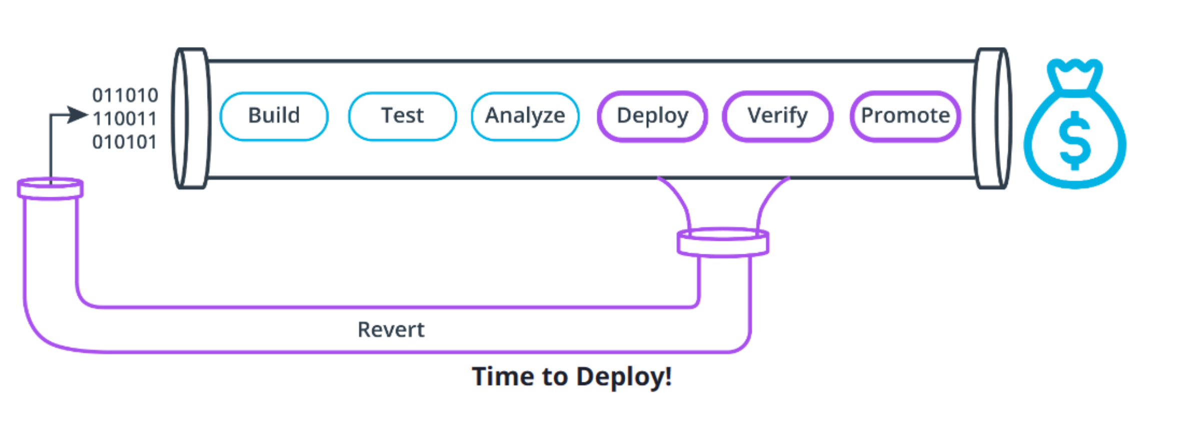
It's the process of "Making". Everything related to the code fits here, and it all culminates in the ultimate goal of CI: a high quality, deployable artifact! Some common CI-related phases might include:

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



Benefits of CI/CD

1 **Cost Deduction**

- Less developer time on issues from new developer code.
- Less infrastructure costs from unused resources

2 **Increase Revenue**

- New value-generating features released more quickly
- Less time to market

Benefits of CI/CD

3

Avoid Cost

- Less bugs in production and less time in testing.
- Prevent embarrassing or costly time in testing .
- Less human error ,Faster deployments.

4

Protect Revenue

- Reduced downtime from a deploy-related crash or major bug
- Quick undo to return production to working state