

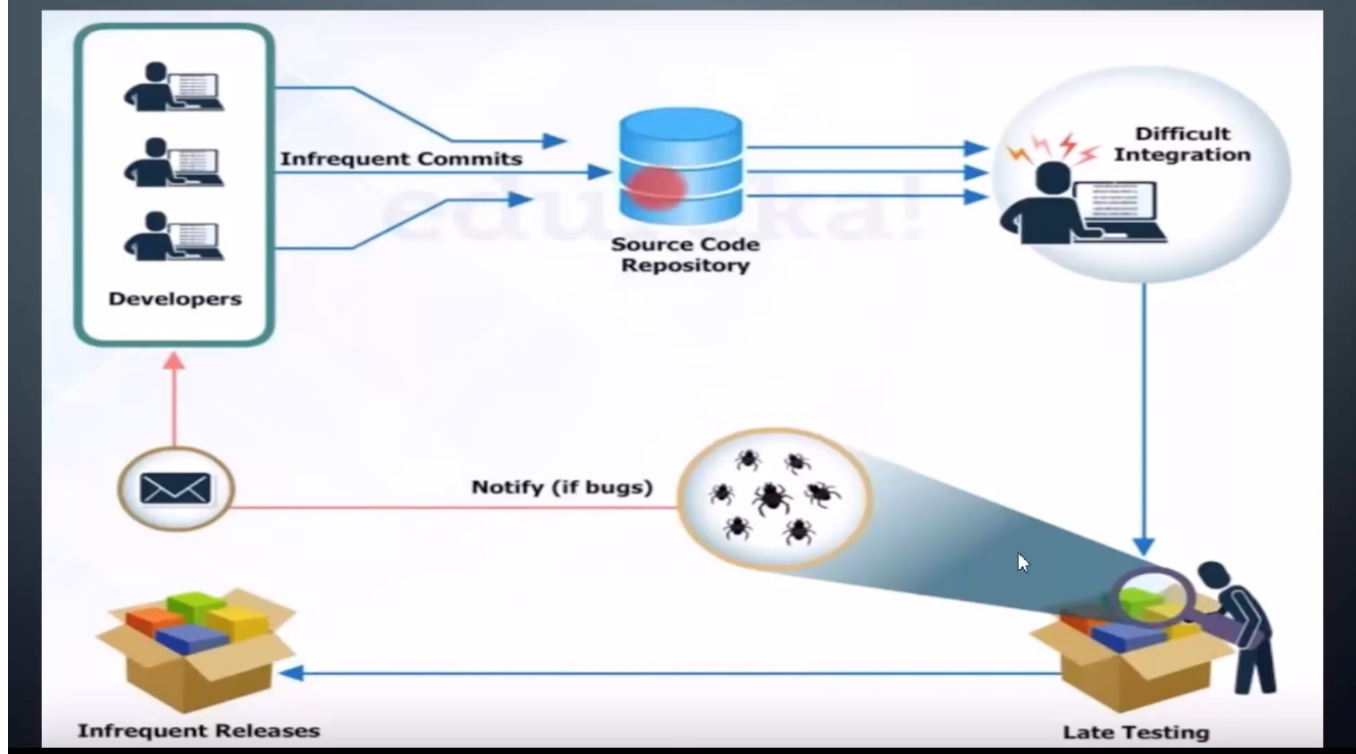
What is Jenkins

- Jenkins is a CI/CD tool used to (build, compile and test) code and deploy it to the production server.
- It has bunch of plugins to support building, deploying and automating any project.
- It is a server-based system that runs in servlet container (Tomcat)
- It supports version control tools like SVN, Git to automate build.

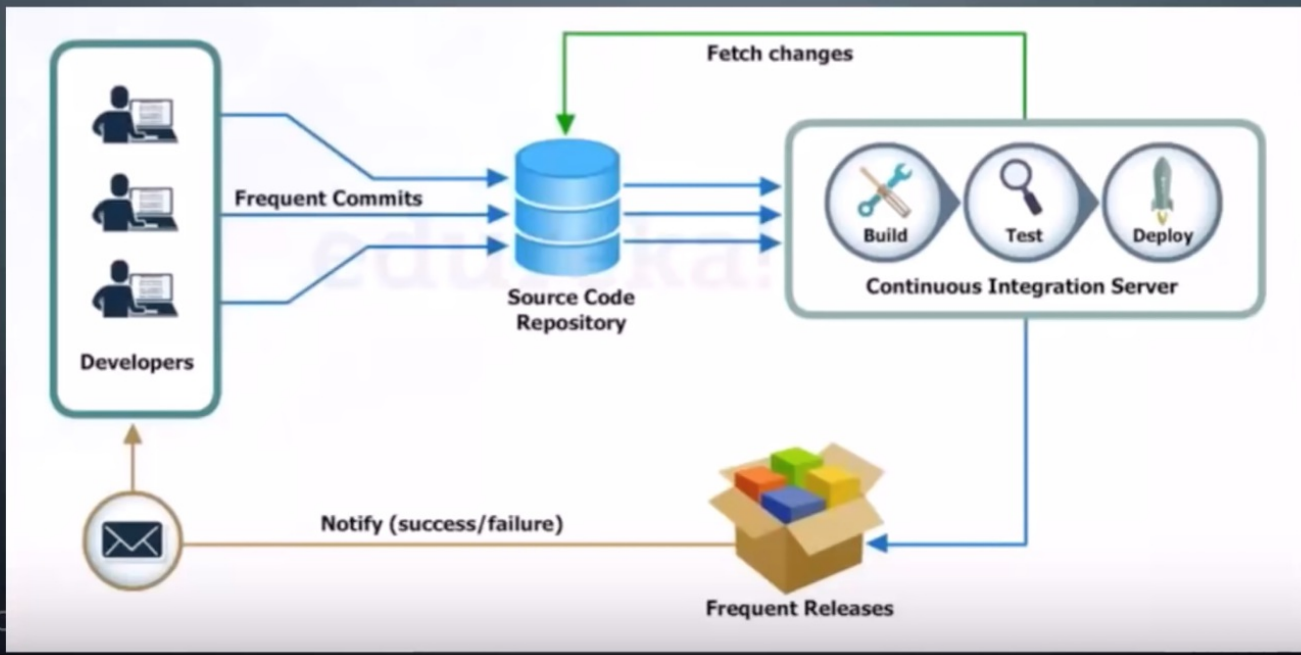
What is Continuous Integration (CI)

- CI is a process in which all development work is integrated as early as possible.
- The resulting artifacts are automatically created and tested.
- This process allows to identify errors as early as possible.

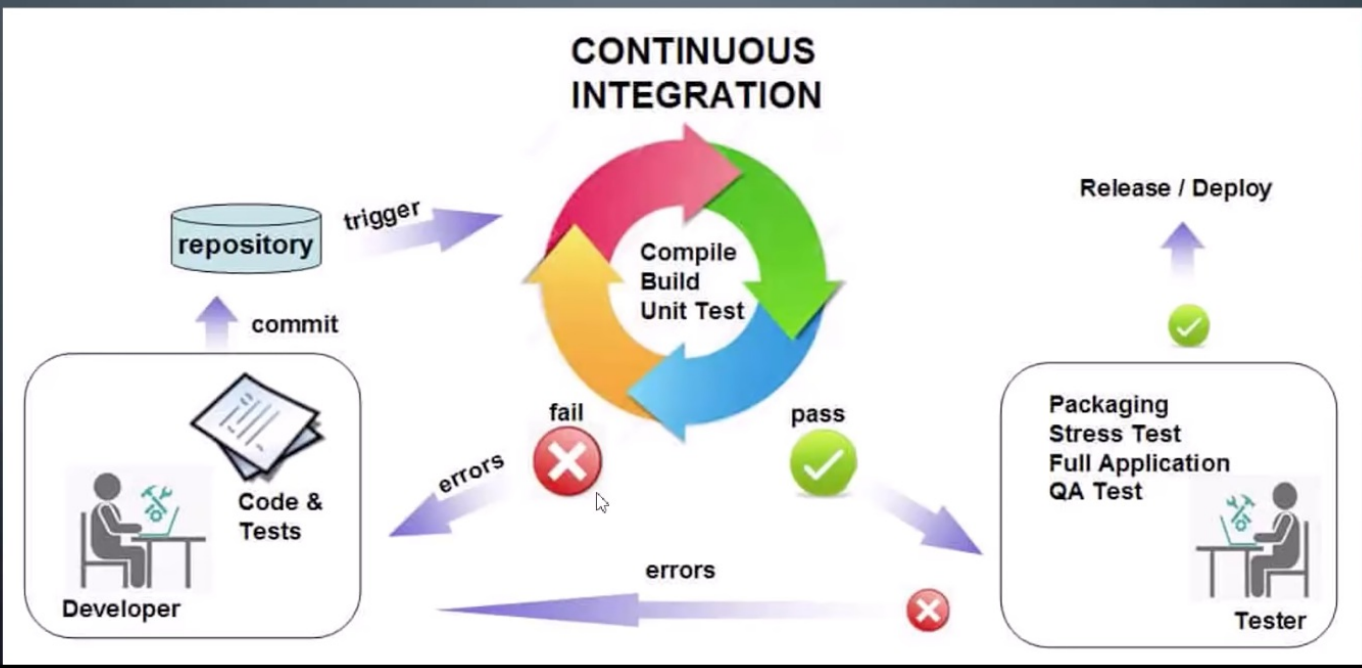
Why We Need Continuous Integration ?



Continuous Integration Architecture



Continuous Integration Work Flow



Comparison

Before Continuous Integration

The entire source code was built and then tested.

Developers have to wait for test results

No Feedback

After Continuous Integration

Every commit made in the source code is built and tested.

Developers know the test result of every commit made in the source code on the run

Feedback is present