Jenkins

Continuous Integration and deployment Tool

What is Jenkins

Jenkins is an automation server software that is used frequently to achieve **continuous integration** and delivery in software projects.

It is one of the most popular continuous integration tools available in the market today. Jenkins is open source and is available free of cost.

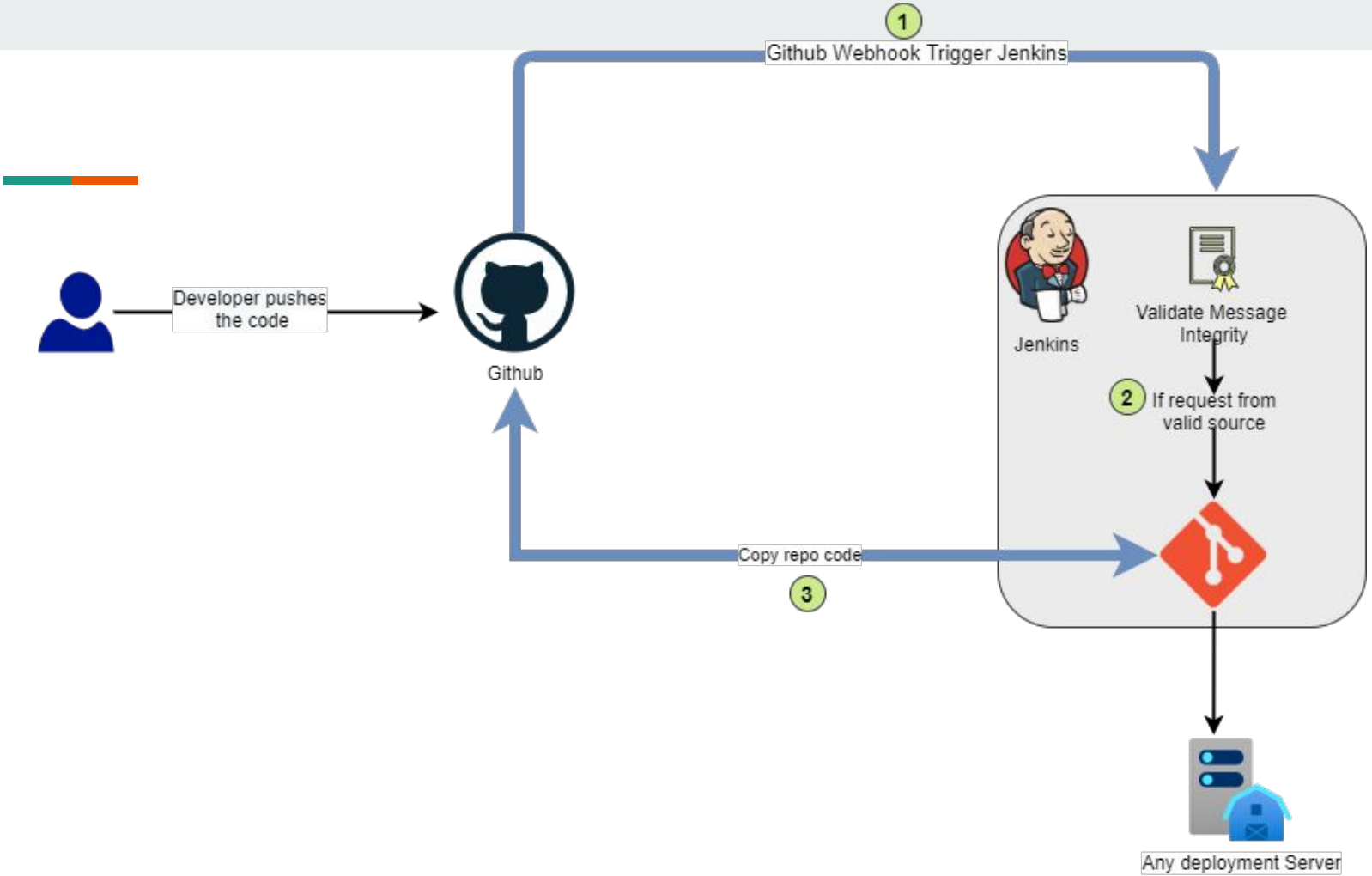
Traditionally, developers used to push their code (the process of code commit) to a version control server. Once there was enough code to build into a release, someone would invoke a build tool that took all the pushed code and created a build out of it, that could be released into a **specific environment (Dev, QA, UAT/ Stag or Production)**.

Continuation….

With continuous integration, this **‘build’** operation is invoked each time a developer pushes his or her code to the repository. Jenkins, in this case, would also run tests to make sure that the build is stable and okay for delivery. If there are problems with the build, Jenkins would notify the developers that there is a problem.

Jenkins supports Windows, Linux, Mac OS X, and Unix operating system. It is supported by an active community that regularly contributes to the features and documentation of the tool.

Developers invoke Jenkins in various ways. Some write a program that executes periodically (a cron job) that allows Jenkins to pick the latest code from the repository and build it. It can also be conditioned to act as soon as there is a new commit in the repository.


1
Github Webhook Trigger Jenkins
Developer pushes the code
Github
Jenkins
Validate Message Integrity
2
If request from valid source
Copy repo code
3
Any deployment Server

Jenkisfile Example

https://gist.github.com/merikan/228cdb1893fca91f0663bab7b095757c

Let’s watch a video on how to build Continuous Delivery!!

https://www.youtube.com/watch?v=x9l6yw1PFbs