**Jenkins:** Jenkins is a self-contained, open source **automation server** which can be used to **automate all sorts of tasks** related to **building, testing** and **delivering** or **deploying** software.

Jenkins main feature, pipeline.

* Detects changes in the subversion/Git.., performs tasks repeatedly [ **Build, Test, Deploy, Integrate**]

Basic concept:

* CI Server integrates newly checked in code into a build.
* Run unit tests and rejects the build if they fail.
* Deploy build to other Servers.
* Also referred to as “build automation”.

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[Jenkins](https://jenkins.io/) is an open source [continuous integration](https://www.blazemeter.com/blog/continuous-integration-101-how-run-jmeter-jenkins?utm_source=blog&utm_medium=BM_blog&utm_campaign=how-to-use-the-jenkins-scripted-pipeline) server that provides the ability to continuously perform automated builds and tests. Several tasks can be controlled and monitored by Jenkins, including pulling code from a repository, performing static code analysis, building your project, executing unit tests, automated tests and/or [performance tests](https://www.blazemeter.com/load-testing?utm_source=blog&utm_medium=BM_blog&utm_campaign=how-to-use-the-jenkins-scripted-pipeline), and finally, deploying your application. These tasks typically conform a continuous delivery pipeline.

[Pipelines](https://jenkins.io/doc/book/pipeline/) are a suite of [Jenkins](https://www.blazemeter.com/jenkins?utm_source=blog&utm_medium=BM_blog&utm_campaign=how-to-use-the-jenkins-scripted-pipeline) plugins. Pipelines can be seen as a sequence of stages to perform the tasks just detailed, among others, thus providing continuous releases of your application. The concept “continuous” is relative to your application and/or environment: In some cases releases can be performed on a daily basis while for others could be weekly, depending on your business needs. In some situations, a critical fix for example, it would be desirable to have your environment ready to release your application as soon as possible. Pipelines provide a way to do this through an automated process.

**Jenkins pipeline (**when we create new and item and selecting pipeline**):**

**Step 1 : download Jenkins.**

**Step 2: got the downloaded extract Jenkins.zip file and Install Jenkins then it opens the browser with http//localhost:8080/**

**Step 3 : To verify Jenkins open command prompt and navigate to the location where we have downloaded “.war file and enter**

**Java -jar Jenkins.war ---🡪 to run and verify Jenkins**

**Step 4 : open the browser and enter http//localhost:8080/ --🡪 Jenkins page will be loaded.**

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**Jenkinsfile:** text file containing the code of your pipeline is also known as a Jenkinsfile.