

Jenkins Pipeline (or simply "Pipeline") is a suite of plugins which supports implementing and integrating continuous delivery pipelines into Jenkins.

Kubernetes: (K8s) is an open-source system for automating deployment, scaling, and management of containerized applications.

KUBERNETES: Kubernetes cluster adds a new automation layer to Jenkins.

Docker is a platform for running applications in an isolated environment called a "container" (or Docker container). Applications like Jenkins can be downloaded as read-only "images" (or Docker images), each of which is run in Docker as a container.

Ansible is a powerful agent-less platform used in IT automation and within the CI/CD process to target an environment onto which the application is deployed. OR Ansible is a cloud-based tool.

### What Is A Jenkins Job?

In simple words, any automated process that is implemented in Jenkins is a Jenkins Job.

Groovy is an agile and dynamic language.: It has seamless integration with all existing Java objects and libraries.

The Multibranch Pipeline project type enables you to implement different Jenkinsfiles for different branches of the same project.

**THROTTLING:** This plugin allows for throttling the number of concurrent builds of a project running per node or globally. To set an unlimited value of concurrent builds for the project or node, use "0".

**concurrent builds** :feature allows you to build a plan concurrently on several agents.

A **node** is a machine which is part of the Jenkins environment and is capable of executing a Pipeline.

**Declarative pipeline** is a relatively new feature that supports the pipeline as code concept. It makes the pipeline code easier to read and write. ... Whereas, the **scripted pipeline** is a traditional way of writing the code. In this pipeline, the Jenkinsfile is written on the Jenkins UI instance.

**Jenkins AWS:** is an open-source automation server that integrates with a number of AWS Services, such as AWS CodeCommit, AWS CodeDeploy, Amazon EC2 Spot, and Amazon EC2 Fleet. You can use Amazon Elastic Compute Cloud (Amazon EC2) to deploy a Jenkins application on AWS in a matter of minutes.

**Amazon Web Services (AWS)** is the world's most comprehensive and broadly adopted cloud platform, offering over 200 fully featured services from data centers globally.