Jenkins

Jenkins DAWS76s

Whatever we do in Jenkins is called as a job

Every job has a work to do

We have free style project where we can create job and pipeline with UI

We have pipeline project in which we can use code steps to configure project but it has dis advantage where we will be keeping code in the UI and there is changes of someone modifying it

We have option for pipeline that we can keep code in SCM and Jenkins will get that pipeline steps from SCM

By keeping in SCM we have advantages like Version control code safety etc

The Jenkinsfile name which is in git and while configuring in Jenkins dashboard pipeline configuration should provide same name

(Example jekins file is in github)

Node: If we have more work load we can create Node agent so that we can specify the agent name in Jenkins file and if any pipelines executions it will run in the Agent

Webhook: we configure git Jenkins webhook so that if there is any code push pipeline will trigger automatically, we can configure it based on project requirement

Like this, we need to pass Jenkins url to git webhook (http://18.212.237.251:8080/github-webhook/

Jenkins is used to build deploy application using cicd

We have free style jobs which are not using now

We have pipeline jobs where we can write a pipeline in UI and it is visible in UI

We can write a Jenkins file and keep it in with code and keep in Github

In pipeline we can mention a github repo url and we can mention Jenkins file name in the creation of a pipeline project in Jenkins

We can configure webhook in guthub with Jenkins url and a pipeline so that a developer is pushed code to a particular branch the pipeline is triggered

We have master node where we can create nodes and we can pass the node name in the Jenkins file so that the pipelines will run in the node

We can create a server and configure that server as node in Jenkins manage Jenkins nodes

If there is any deployments related to terraform ansible we need to install them in the node if we have node as pipelines in running in the nodes

If we don’t have node we can install them in the master

If we want our pipeline is showing with colour we can use ansi colour plugin and Jenkins and pass the ansi colour in the Jenkins file

We can integrate Jenkins with github terraform and ansible

We have below for cicd

Code source

Install dependencies

Unit test

Build

Sonar scan (By passing sonar-scaner)

SAST

Library scan

DAST

Nexus artefact uploader (by providing artefact uploader step in Jenkins pipeline)

CD:

Deploy

Infrastructure creation

Installing required configuration for application running