1. Launch 3 EC2 instances with T2-micro
2. One Instance is for Jenkins master and other two instances will the nodes
3. <https://www.youtube.com/watch?v=zEQUuo5nWbo>
4. In the AWS mgmt. console, go to EC2 service, you could see three instances in running state
5. Label one instance as Jenkins Master and other as Jenkins Node 1 and Node 2
6. Login to EC2 Jenkins Master instance with its IP
7. Generate the SSH Key on Master. This is required to establish the connection between Jenkins master and Jenkins slaves ( node 1 and Node 2 ). Once the key is generated in the master, the key will be copied to the slaves instances.
8. Creating the ssh key on the Jenkins master
   1. Use the command ssh-keygen –t rsa –C [zzzz@gmail.com](mailto:zzzz@gmail.com)
   2. cat .ssh/id\_rsa.pub and copy the ssh key
   3. Once the key is generated, login to the node 1 using the Public IP
   4. Execute the command echo “paste the key copied in the step b” >> .ssh/authorized\_keys
9. Next step is to download the Jenkins and install the Jenkins on the master ec2 instance.
10. Go to master instance in Putty
11. Exeucte the below commands

[ec2-user@ip-172-31-9-31 ~]$ sudo wget -O /etc/yum.repos.d/jenkins.repo http://pkg.jenkins-ci.org/redhat/jenkins.repo

--2017-11-11 11:44:22-- http://pkg.jenkins-ci.org/redhat/jenkins.repo

Resolving pkg.jenkins-ci.org (pkg.jenkins-ci.org)... 52.202.51.185

Connecting to pkg.jenkins-ci.org (pkg.jenkins-ci.org)|52.202.51.185|:80... connected.

HTTP request sent, awaiting response... 200 OK

Length: 71

Saving to: ‘/etc/yum.repos.d/jenkins.repo’

/etc/yum.repos.d/jenkins.repo 100%[========================================================================>] 71 --.-KB/s in 0s

2017-11-11 11:44:22 (10.5 MB/s) - ‘/etc/yum.repos.d/jenkins.repo’ saved [71/71]

[ec2-user@ip-172-31-9-31 ~]$ sudo rpm --import https://jenkins-ci.org/redhat/jenkins-ci.org.key

[ec2-user@ip-172-31-9-31 ~]$ sudo yum install jenkins

Loaded plugins: priorities, update-motd, upgrade-helper

amzn-main | 2.1 kB 00:00:00

amzn-updates | 2.5 kB 00:00:00

jenkins | 2.9 kB 00:00:00

jenkins/primary\_db | 103 kB 00:00:00

Resolving Dependencies

--> Running transaction check

---> Package jenkins.noarch 0:2.89-1.1 will be installed

--> Finished Dependency Resolution

Dependencies Resolved

=======================================================================================================================================================

Package Arch Version Repository Size

=======================================================================================================================================================

Installing:

jenkins noarch 2.89-1.1 jenkins 71 M

Transaction Summary

=======================================================================================================================================================

Install 1 Package

Total download size: 71 M

Installed size: 71 M

Is this ok [y/d/N]: y

Downloading packages:

jenkins-2.89-1.1.noarch.rpm | 71 MB 00:00:07

Running transaction check

Running transaction test

Transaction test succeeded

Running transaction

Installing : jenkins-2.89-1.1.noarch 1/1

Verifying : jenkins-2.89-1.1.noarch 1/1

Installed:

jenkins.noarch 0:2.89-1.1

1. Start the Jenkins service and by default Jenkins runs on port 8080. If you wish to change the port you can it. Use the command “sudo service jenkins start”
2. Sometime jenkins will not start if the supported java version required for Jenkins isnot available on the ec2 instance. Its better to update the java version to 1.8. In my instance I got the exception “Starting Jenkins Jenkins requires Java8 or later, but you are running 1.7.0\_151-mockbuild\_2017\_08\_09\_21\_42-b00 from /usr/lib/jvm/java-1.7.0-openjdk-1.7 .0.151.x86\_64/jre”. To overcome this, I updated the java on my master instance and also on my nodes.
3. Command I used to remove the 1.7 java and install java 1.8 are below. I executed this commands on master and also on nodes.
   1. sudo yum install java-1.8.0
   2. sudo yum remove java-1.7.0-openjdk
4. After the above steps being executed, I was able to start the jenkins successfully. And using the Public IP of master ec2 instance, I was able to open the jenkins page.
5. Jenkins installation will ask to enter the administrator password to authenticate yourself during the installation. You have to get the initialadminsitrator password from the master instance as root user from the path /var/lib/jenkins/secrets. Use the password to resume the installations
6. In the next window, you will asked to select the plugins that you need based on ur choice to select the capabilities your Jenkins should have. You can select of ur choice of proceed towards installation.
7. Once the installation of plugins are successfully, your Jenkins will set up. ☺