**CICD PROJECT**

CICD PROJECT IN (AWS)

* Create 3 instance at a time in ec2
* Go to security settings—inbound rules—add rule
* All icmp-ipv4 ….. anywhere
* **http** ……. Anywhere
* custom …… **8080**…….anywhere
* Then open the **jenkins** putty
* # sudo su –
* # passwd //generate root password//
* # vi /etc/ssh/sshd\_config /// password authentication change **yes**//
* **# ssh-keygen**
* **Installation of Jenkins in Jenkins machine**
* # yum update –y
* # wget –O /etc/yum.repos.d/Jenkins.repo <https://pkg.jenkins.io/redhat-stable/jenkins.repo>
* # rmp –import <https://pkg.jenkins.io/redhat-stable/jenkins.io.key>
* yum upgrade
* amazon-linux-extras install java-openjdk11 -y
* yum install jenkins -y
* systemctl enable jenkins
* systemctl start jenkins
* systemctl status Jenkins
* next copy the Jenkins public ip and paste the httpd:// \*\*\*\*\*\*\*\*:8080
* its open one Jenkins page copy the text and past the putty
* like // cat /var/lib/Jenkins/secrets/initialadminpassword //
* it will show the one of the password in putty copy and paste the webpage
* **GIT INSTALLATION IN JENKINS**
* yum install git –y
* yum update git –y
* mkdir project
* cd project
* (projrct) # vi index.html
* (projrct) # git init
* (projrct) # git add .
* (projrct) # git commit –m “1st commit”
* (projrct) # git status
* (projrct) # git remote add origin https://github.com/charankumar125s/charan.git
* (projrct) # git push –u origin master
* User name : charankumar125s
* Password: git token
* Successfully push the file in github check it in github
* (projrct) # cd ..
* (root) # cd .ssh
* (.ssh) # ls –al
* (.ssh) # scp id\_rsa.pub ansible pub ip :/root/.ssh
* Check the ansible ip ping or not
* # ssh ansible ip { without asking password is it right way}
* Open the ansible putty hear
* **Open ansible putty machine**
* # sudo su –
* # passwd //generate root password//
* # vi /etc/ssh/sshd\_config /// password authentication change **yes**//
* **# ssh-keygen**
* cd .ssh/
* (.ssh) # cat id\_rsa.pub >> authorized\_keys
* ll –al
* installation of ansible
* amazon-linux-extras install epel –y
* yum install ansible –y
* ansible –version
* (root) # cd .ssh
* (.ssh) # ls –al
* (.ssh) # scp id\_rsa.pub web pub ip :/root/.ssh
* Check the ansible ip ping or not
* # ssh web ip { without asking password is it right way}

1. Open the web putty here

* **Open the web putty**
* # sudo su –
* # passwd //generate root password//
* # vi /etc/ssh/sshd\_config /// password authentication change **yes**//
* **# ssh-keygen**
* cd .ssh/
* (.ssh) # cat id\_rsa.pub >> authorized\_keys

1. Copy the Jenkins ip address Open the Jenkins web page
2. Manage Jenkins > configure system
3. Scroll down to SSH servers > add > ssh server
4. Name –jenkins
5. Host name –jenkins public id
6. User name : root
7. Advance > select user password authentication >>
8. Enter the >> Jenkins root password
9. Test configuration – test configuration should be success

* Add ssh server for ansible

1. Name –ansible
2. Host name –ansibles public id
3. User name : root
4. Advance > select user password authentication >>
5. Enter the >> Jenkins root password
6. Test configuration – test configuration should be success
7. Apply & save

* **Go to the Jenkins >>** select the down arrow, next to the logout option
* Configure >> add new token >> generate >> copy and save the token >> apply >> save
* **Go to github** >>
* current project >> settings >> add webhook
* Past the jenkins url
* Content type – json
* Secret code – Jenkins token copy hear
* Save it
* **Go to Jenkins** >>
* dashboard >> new items >>
* Enter the name >> freestyle project >> ok
* Under project name >> configure >>
* Git >> paste the git repository >> git >> github hook triggers
* Bulid steps >> select send files or execute command or ssh
* Name = Jenkins
* Exec command = **rsync –avh /var/lib/jenkins/workspace/project name/index.html ansible ip :/opt**
* Apply & save
* Then build it
* **Go to ansible putty**
* Vi /etc/ansible/hosts
* Scroll down >>
* [web]
* Web ip
* :wq
* Vi web.yaml
* Write the yaml code
* ---
* - hosts: web
* tasks:
* - copy:
* src: /opt/index.html
* dest: /var/www/html
* ansible-playbook web.yaml –C
* **Go to Jenkins webpage**
* Under project name >> configure >>
* Build steps >> select send files or execute command or ssh
* Name = ansible
* Exec command = ansible-playbook web.yaml
* Apply & save
* Build it

**[copy the web instance public ip & paste the http:// public ip ]**

**Out put:**

**Display the output**