Jenkins and EC2 configuration

* Create EC2
* Login using MobaXterm
* To enable ssh to host and Jenkins connectivity to host enable:

1. SSH for 22 with anywhere IPv4
2. Custom TCP for 8080 with anywhere IPv4

* Configure git, java, maven, Jenkins from <https://github.com/satyam88/greentea/blob/master/ami> < point B
* <http://publicip:8080> >> locate password >> install default plugins >> point A >> Create first admin user >> mention username=”jenkinsadmin” and everythin same and email=[jenkinsadmin@gmail.com](mailto:jenkinsadmin@gmail.com) >> Save >> Save URL >> Setup done
* Manage Jenkins >> Plugins >> AWS: credentials and pipeline, Kubernetes: cli, pipeline, credentials and kubernetes >> restart Jenkins
* Restart Jenkins from host cli

1. Service Jenkins status
2. Service Jenkins stop
3. Service Jenkins start

* Automate ping test

1. New item >> demofirstjob >> Freestyle project >> Build steps
2. #!/bin/bash
3. Ping –c 5 [www.google.com](http://www.google.com) /tmp/google.txt
4. Triggers >> Build periodically >> \*/1 \* \* \* \*

* Runs the build ..........displays error for permission denied
* Add Jenkins after checking Jenkins user

1. Id Jenkins
2. Ls –ld /tmp/google.txt
3. Visudo >> add Jenkins all ..............Allow to run anywhere
4. Jenkins ALL=(ALL) NOPASSWD: ALL
5. Ctrl+S, Ctrl+X
6. Verify the line in sudo file

* Runs for next min run

1. Ls –lrth /tmp/google.txt .............show that file owned by root
2. Chown Jenkins:Jenkins /tmp/google.txt
3. Chmod 755 /tmp/google.txt
4. Ls –lrth /tmp/google.txt

* Runs for next min run and SUCCESS
* Create new item name=”hello\_world” and echo the file, and build now
* Manage Jenkins >> Tools >> JDK installations >> Name=Java\_21 >> JAVA\_HOME=java path ..........which java, readlink –f /usr/bin/java

Resulting path is /usr/lib/<java\_library\_as mentioned>

* Manage Jenkins >> Tools >> Git installations >> Name=git >> git >> Path to git executable=git path .......which git

Resulting path is /usr/bin/git

* Manage Jenkins >> Tools >> Maven installations >> Name=mvn\_3.9.9 >> MAVEN\_HOME=maven path ..........echo $M2\_HOME

Resulting path is /opt/<maven\_library\_as\_mentioned>

* SAVE

**A:** in browser search Jenkins plugin index to search any plugins to increase capability

**B:**

===========4th-May-2025===========

yum -y update

yum install -y git

yum install -y java-21-amazon-corretto

yum install -y java-21-amazon-corretto-devel

cd /opt

sudo wget https://dlcdn.apache.org/maven/maven-3/3.9.9/binaries/apache-maven-3.9.9-bin.tar.gz

sudo tar xvf apache-maven-3.9.9-bin.tar.gz

ls -ltr

cd

echo "export M2\_HOME=/opt/apache-maven-3.9.9" >> .bash\_profile

echo "export M2=$M2\_HOME/bin" >> .bash\_profile

echo "export PATH=$M2:$PATH" >> .bash\_profile

source ~/.bash\_profile

echo $M2\_HOME

git --version; java --version; /opt/apache-maven-3.9.9/bin/mvn --version

sudo wget -O /etc/yum.repos.d/jenkins.repo \

https://pkg.jenkins.io/redhat-stable/jenkins.repo

sudo rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io-2023.key

sudo yum upgrade

sudo yum install -y jenkins

sudo systemctl daemon-reload

service jenkins start

chkconfig jenkins on

cat /var/lib/jenkins/secrets/initialAdminPassword

http://publicip:8080

Jenkins a automation server?

Working with tools in jenkins