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*****
JENKINS WITH DOCKER
*****
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STEP:1 CREATE AWS UBUNTU INSTANCE WITH PORT NO:8080

STEP:2 INSTALL DOCKER

STEP:3 INSTALL JDK

STEP:4 INSTALL MAVEN

STEP:5 INSTALL JENKINS

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*****
STEP:1 CREATE AWS UBUNTU INSTANCE WITH PORT NO:8080
*****
```

1. Prepare AWS Instance(Ubuntu Server 22.04 LTS (HVM), SSD Volume Type)
2. Security : Add port no: 80 with Custom TCP Rule
3. Download .pem Key and connect using Moba x-term

open moba x-term

> cd d: //here d: is my drive

> cd phase-5 //phase-5 is a folder inside d: driver where .pen key is available

>goto> aws >instance>choose your instance>connect>ssh>copy example key

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STEP:2 DOCKER INSTALLATION ON UBUNTU OS
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GOTO > GOOGLE> DOCKER INSTALLTION ON UBUNTU

LINK:<https://docs.docker.com/engine/install/ubuntu/>

>sudo apt-get update

>sudo apt-get install ca-certificates curl gnupg lsb-release

>sudo mkdir -p /etc/apt/keyrings

>curl -fsSL <https://download.docker.com/linux/ubuntu/gpg> | sudo gpg --dearmor -o /etc/apt/keyrings/docker.gpg

>echo "deb [arch=\$(dpkg --print-architecture)
signed-by=/etc/apt/keyrings/docker.gpg] <https://download.docker.com/linux/ubuntu>
\$(lsb_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list > /dev/null

>sudo apt-get update

>sudo apt-get install docker-ce docker-ce-cli containerd.io docker-compose-plugin

-----TO VERIFY THE INSTALLTION-----

> sudo docker -v

output: Docker version 20.10.18, build b40c2f6

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STEP:3 INSTALL JDK
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> sudo apt-get update

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> sudo apt install default-jdk -y
```

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*****  
STEP:4 INSTALL MAVEN  
*****
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```
> sudo apt-get update  
> sudo apt install maven -y
```

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*****  
STEP:5 INSTALL JENKINS  
*****
```

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goto> google> how to download jenkins in ubuntu  
link: https://www.jenkins.io/doc/book/installing/linux/
```

```
>curl -fsSL https://pkg.jenkins.io/debian-stable/jenkins.io.key | sudo tee  
/usr/share/keyrings/jenkins-keyring.asc > /dev/null
```

```
>echo deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc]  
https://pkg.jenkins.io/debian-stable binary/ | sudo tee  
/etc/apt/sources.list.d/jenkins.list > /dev/null
```

```
>sudo apt-get update  
>sudo apt-get install jenkins
```

1. TO START WITH JENKINS

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> sudo service jenkins start  
> sudo service jenkins status
```

CONNECT: goto> AWS>EC2>Copy Public IP:8080 on browser hit enter

2. TO GENERATE SECRET PASSWORD

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> sudo cat /var/lib/jenkins/secrets/initialAdminPassword
```

```
---to deal with permission denied error---  
> sudo chmod 777 /var/run/docker.sock
```

copy the secret password to jenkins and start installtion

3. FOR CONTINUOUS INTEGRATION (CI)

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1. click on install suggested plugins
2. provide your credentials
3. welcome to jenkins
4. manage plugin>maven integration> click on install without restart
5. goto>dashboard>create>new job>select freestyle project> give name>click ok
6. give description
7. sourcecode management
GIT:
URL: https://github.com/Nikunj-Java/docker_master.git
BRANCHES TO BUILD: */master or */main
8. Build Trigger
POLL SCM:
H/2 * * * *

9. CLICK ON APPLY AND SAVE

10. BUILD THE PROJECT