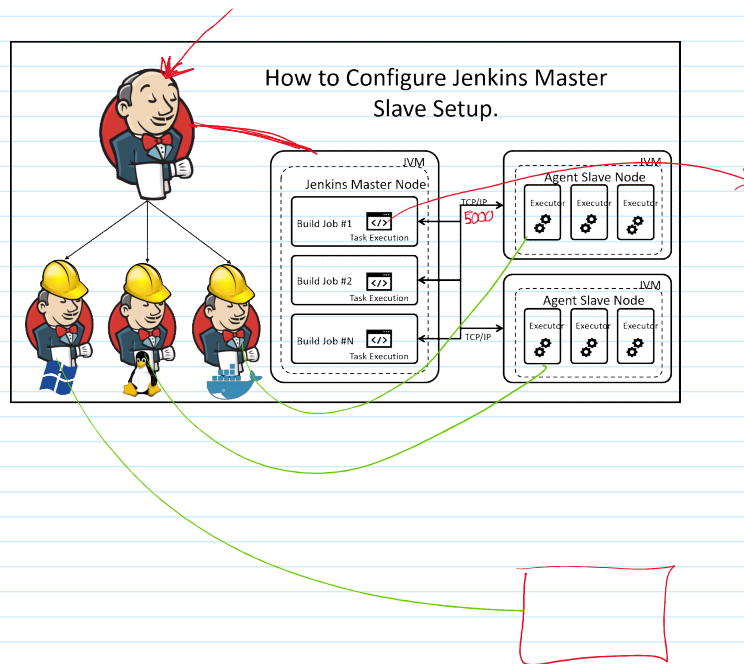


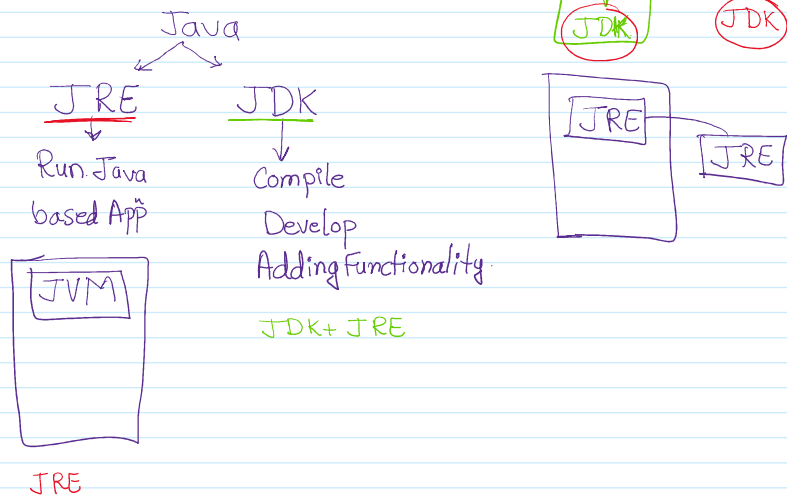
34.11May.MasterSlaveJenkins

11 May 2023 07:16 PM

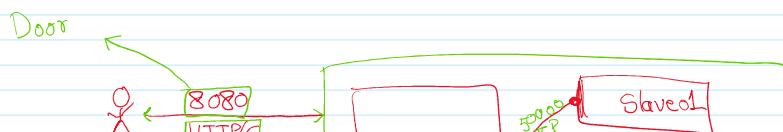


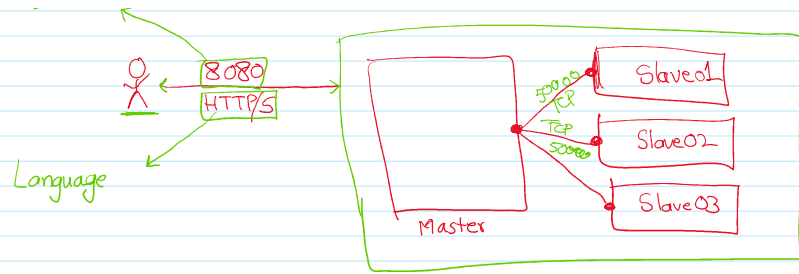
JVM

- ✓ ◦ Runtime Environment
- ✓ ◦ Support Multiple Types OS.
- Jenkins → JVM → JRE → JDK → Java.

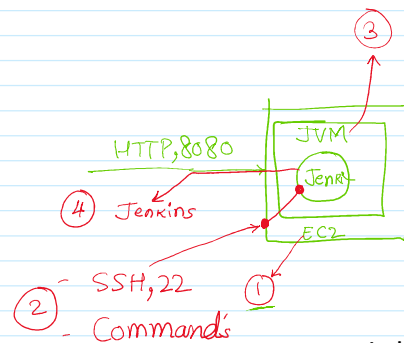


Jenkin Cluster





| Language | Port's |
|----------|--------------|
| • HTTP/s | = 8080 , 443 |
| • TCP | = 50,000 |



Lock:

Pub = Public Key

Key:

PEM = Open SSH Private Key

PPK = Putty Private Key

- Order Jenkins Master(N)
 - # OS: Ubuntu
 - # SG: Practice= All Traffic, Organization=(SSH, HTTP=8080, HTTPS=443, TCP=50000)
 - # KeyPair: Import using pub file and Access using PEM/PPK File
- Connect using SSH Command
 - # ssh -i key.pvt username@IPAddress
 - # ssh -i mujahed.pem ubuntu@35.172.226.23
- Install Java(OpenJDK11= JDK+JRE)
- Install Jenkins

create Key(PEM) and Lock(PUB)

- Command Line: SSH-KeyGen = id_rsa.pub, id_rsa [pem](without extension) = Standard POSIX (OpenSSH Method)
 - Address of Key and Lock: ~/.ssh folder Linux
 - Address of Key and Lock: %userprofile%\.ssh folder Windows
- GUI Software: PuttyKeygen = pub, ppk = Specific to Putty based Software
- Cloud Service: AWS KeyPair(Lock will be hidden) = pem

3.83.240.121 slave01
35.172.226.23 master

```
# sudo su
# apt update
# apt install openjdk-11-jdk -y
# java -version
# javac -version

# curl -fsSLhttps://pkg.jenkins.io/debian-stable/jenkins.io-2023.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

# sudo systemctl status jenkins

# sudo systemctl enable jenkins
```

Check Browser

<http://MasterIPAddress:8080>

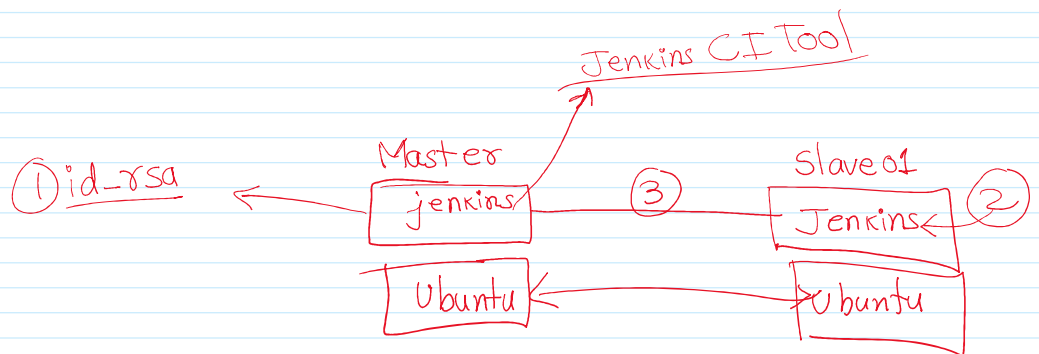
```
# cat /var/lib/jenkins/secrets/initialAdminPassword
```

- Install Suggest Plugins
- Create Freestyle and Check your Jenkins Master working or not.

Jenkins User KeyGeneration

```
ubuntu@master $ sudo su root
master # su jenkins
jenkins@master $ ssh-keygen /var/lib/jenkins/.ssh/id_rsa
```

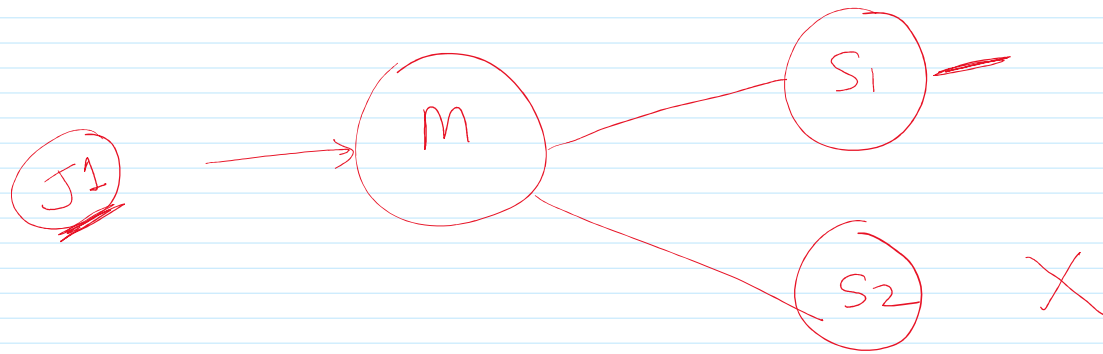
Add Credentials in Master Jenkins



SLAVE01

```
# sudo su
# apt update
# apt install openjdk-11-jdk -y

# useradd -m -s /bin/bash jenkins
# passwd jenkins
```



1. Pub --> Auth Done
2. Naming : /etc/hosts Done
3. PEM File
4. Config --> Host...

Create Jenkins Server

```
# docker run -d -v jenkins_home:/var/jenkins_home -p 8080:8080 -p 50000:50000 jenkins/jenkins:its
```

Find Container ID

```
# docker ps
ddfcd5d8f6b8
```

Inside container

```
# docker exec -i -t --user root <ContainerID> /bin/bash
```

```
# docker exec -i -t --user root ddfcd5d8f6b8 /bin/bash
```

Execute commands in Container

```
# cat /var/jenkins_home/secrets/initialAdminPassword
```