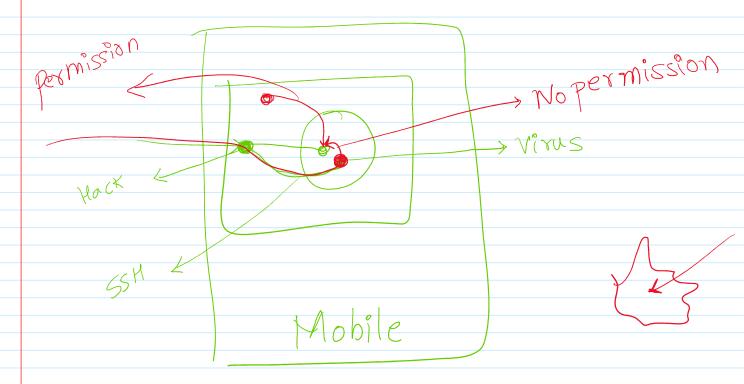
## 33.10May.Adv. Cluster Preparation

10 May 2023 07:03 PM



Memory Card 256GB = 5000(3.0) --> 100(1/2.0) 4GB

Linux (Ubuntu, Kali, MacOS)

Open Source = MD5 , Checksum, GPG Key, SHA Official Website

facebook.com ---> My --> FB = XARG/Forward

https://Amzon.com

Metasploit

DevSecOps

Docker + Jenkins

Jenkins Cluster

Multiple Nodes(EC2 Instances)

- a. Master
- b. Slave

- S1 master 13.127.212.148 172.31.7.172 S2 slave 3.110.217.74 172.31.0.63
  - 1. Order Ubuntu instance for Jenkins-Master
  - 2. .ssh> ssh -i mujahed.pem ubuntu@PublicIPMaster
  - 3. \$ sudo su
  - 4. # apt update
  - 5. # hostname master
  - 6. # bash
  - 7. # apt install openjdk-11-jdk -y
  - 8. # java -version
  - 9. # curl -fsSL https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key | sudo tee /usr/share/keyrings/jenkins-keyring.asc > /dev/null
  - 10. # echo deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc] <a href="https://pkg.jenkins.io/debian-stable-binary/">https://pkg.jenkins.io/debian-stable-binary/</a> | sudo tee /etc/apt/sources.list.d/jenkins.list > /dev/null
  - 11. # sudo apt-get update
  - 12. # sudo apt-get install -y jenkins
  - 13. # systemctl status jenkins
  - 14. Check in browser: <a href="http://PublicIP/">http://PublicIP/</a>
- 15. # cat /var/lib/jenkins/secrets/init
- 16. UserName: master
- 17. Password: 123
- 18. .ssh> scp -i mujahed.pem mujahed.pem ubuntu@13.127.212.148:/home/ubuntu/
- 19. # cp mujahed.pem /var/lib/jenkins/.ssh/

## Jenkins Slave:

- 1. Order Instance with Same Configurations (SG, Key, Region, Slave1)
- 2. .ssh> ssh -i mujahed.pem ubuntu@PublicIPSlave1
- 3. \$ sudo su
- 4. # apt update
- 5. # hostname slave1
- 6. # bash
- 7. # apt install openjdk-11-jdk -y
- 8. # java -version
- 9. # javac -version

## **Cluster Preparation**

- 1. Jenkins
- 2. Ansible
- 3. Docker Client Server
- 4. Linux Cluster
- 5. Kubernetes
- 1. Order 2 server(m,s)
- 2. Connect to m --> ssh localhost (.ssh created)
- 3. scp mujahed.pem --> m
- 4. Create /home/ubuntu/.ssh/config file

Host \*

User ubuntu

IdentityFile /home/ubuntu/.ssh/mujahed.pem

- 5. \$ ssh IP
- 6. Configure local DNS (/etc/hosts)

FQDN IPAddress Master IPAddress slave1 IPAddress Slave2 IPAddress Slave3

- 7. \$ ping Master
- 8. \$ ssh slave1

## Scheduled Build - Pull SCM/ CORN Job

- 1. Jenkins Master Slave
- 2. Pushing Docker Image

 S1 master 13.127.212.148
 172.31.7.172

 S2 slave 3.110.217.74
 172.31.0.63

nano /etc/hosts 172.31.7.172 master 172.31.0.63 slave1

3.109.216.169 m

3.109.139.97 s

sudo nano /etc/hosts 172.31.39.108 m 172.31.36.132 s

cat /home/ubuntu/.ssh/config

Host \*

User ubuntu

IdentityFile /home/ubuntu/.ssh/mujahed.pem