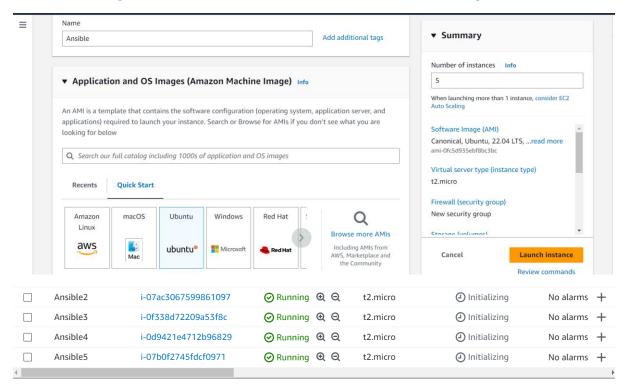
Module 5: Ansible Assignment - 5

- 1. Create a new deployment of Ansible cluster of 5 nodes
- 2. Label 2 nodes as test and other 2 as prod
- 3. Install Java on test nodes
- 4. Install MySQL server on prod nodes Use Ansible roles for the above and group the hosts under test and prod.

5instances naming ansible 1 to 5 are created in aws with ubuntu machine image



 Navigated into ansible1 instance and set hostname as ansible master. Ssh key is generated and copied for further use

i-00fe8d736ab70cd38 (Ansible1) PublicIPs: 54.221.158.23 PrivateIPs: 172.31.30.200

```
ubuntu@ip-172-31-30-200:-$ sudo cat ./.ssh/id_rsa.pub
ssh-rsa AAAAB3NzacIycZEAAAADAQABAAABgQcvAFA2pTadhwYdlYMKqcIYzZwa7oYJ2jephsp6/Mek0CWh7Euj+ZP30c3OQibCzAbt0E+nGQy1EKVH1BwORSixH8fbFUhhdVxKTD2yq
hBZmNHeFgLX15XVqk1SrXOt+R1HHwdnKnpGbGVmkwGajkWkvThPhVXHOSj3YU4it4PR3LZRzc1f/W+FYM1S3d1HDyvD03610LKy4L191hNOR3mHv/Boc6vTFp9922SZYVepEclJa0t0rz
eqCciBLqb0f2FGTk7UMeJsobo7kOMrp6urKJSN9qQQ45hVs1IR5dF20oR1k1kDFSEhV+wp140TAUhP6601JXFYS1cA/zZf43DLpcgRRvOkirruMp0cuwoF1v1vUvlbS5j7OTWAFynypjF
WSuMVPcchoUW0XxdzK3OiHLziqCTRHsz1Xgy+7S/pp0XzK5mv+cR2L2JOYQZdkORci2IrP/dBD2tC1WfAGzgBXEXzXGHyExwjctXK/WD15Rd62Kmm+Vooa0uAZuxmM2U= ubuntu@ip-1
72-31-30-200
ubuntu@ip-172-31-30-200:-$
```

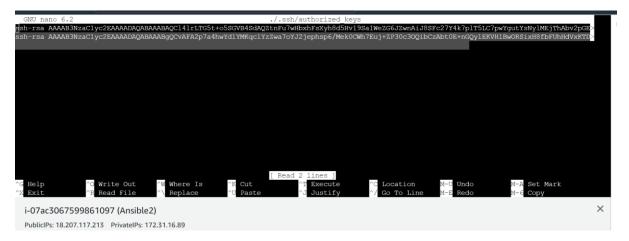
Navigated into ansible2 instance and set hostname as test1

```
ubuntu@ip-172-31-16-89:~$ sudo hostnamectl set-hostname test1
ubuntu@ip-172-31-16-89:~$ sudo nano ./.ssh/authorized_keys
ubuntu@ip-172-31-16-89:~$ sudo nano ./.ssh/authorized_keys
ubuntu@ip-172-31-16-89:~$ []

i-07ac3067599861097 (Ansible2)

PublicIPs: 18.207.117.213 PrivateIPs: 172.31.16.89
```

• In test1 navigated to ./.ssh/authorized_keys and pasted the ssh key generated in instace 1.



- Same procedure followed for ansible3-test2, ansible4-prod1 and ansible5-prod2
- Sshkey generated in ansible master is copied in ./.ssh/authorized_keys in test1&2 and prod1 &prod2
 - A shellscript file is created with ansible installation commands in ansible master
 - Shellscript file is executed to install ansible in ansible master.

- Then navigated into etc/ansible/hosts.
- Ip addresses of test1&2 and prod1&2 are added into groups naming test and prod

To check the ansible cluster ansible -m ping all command is executed

```
ubuntu@ansible-master:-$ ansible -m ping all
prodi | SUCCESS => {
    "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": false,
    "ping": "pong"
}
test2 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": false,
    "ping": "pong"
}
test1 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": false,
    "ping": "pong"
}
prod2 | SUCCESS => {
    "ansible_facts": {
        "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": false,
    "ansible_facts": {
        "ansible_facts": {
        "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
        ),
        "changed": false,
        "ansible_facts": {
        "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
        ),
        "changed": false,
        "ansible_facts": {
        "ansible_facts": {
        "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
        ),
        "changed": false,
        "ansible_facts": {
        "ansible_facts": {
```

Ansible cluster is successfully created with 5 nodes

• In ansible master a playbook javainstall.yml is created with script to install java on test servers

Javainstall.yml playbook is executed to successfully install java on test servers

```
ubuntu@ansible-master:~$ vi javainstall.yml
ubuntu@ansible-master:~$ ansible-playbook javainstall.yml

PLAY [test]

TASK [Gathering Facts]
ok: [test2]

TASK [Update APT cache] ***
changed: [test2]

TASK [Update APT cache] ***
changed: [test2]

TASK [Install Java OpenJDK]
changed: [test2]

TASK [Install Java OpenJDK]
changed: [test2]
change
```

• Similarly sqlinstall.yml playbook is created in ansible master to install sql in prod servers

```
ubuntu@ansible-master:~$ cat sqlinstall.yml
---
- hosts: prod
become: yes
tasks:
- name: mysql installation
apt:
    name: mysql-server
    state: present
- name: start mysql service
service:
    name: mysql
    state: started
```

• Sqlinstall.yml playbook is executed. Successfully sql is installed in prod servers