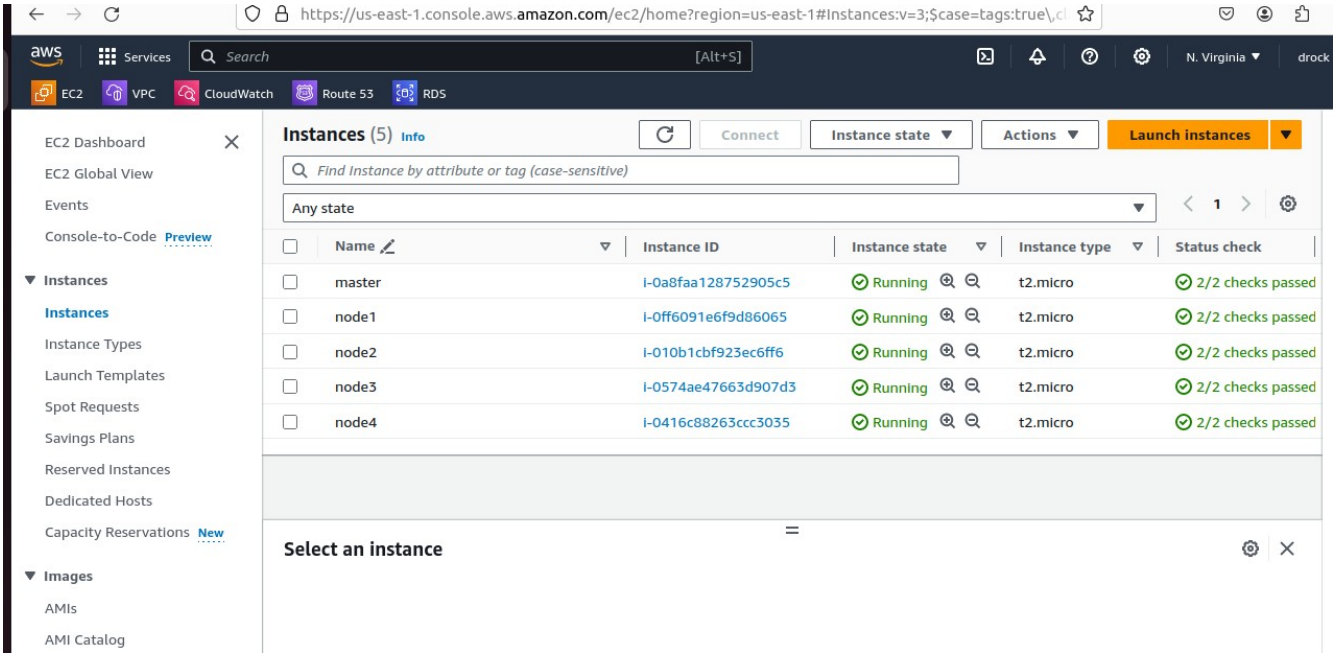
1. Create a new deployment of Ansible cluster of 5 nodes
2. Label 2 nodes as test and other 2 as prod
3. Install Java on test nodes
4. Install MySQL server on prod nodes

Use Ansible roles for the above and group the hosts under test and prod.



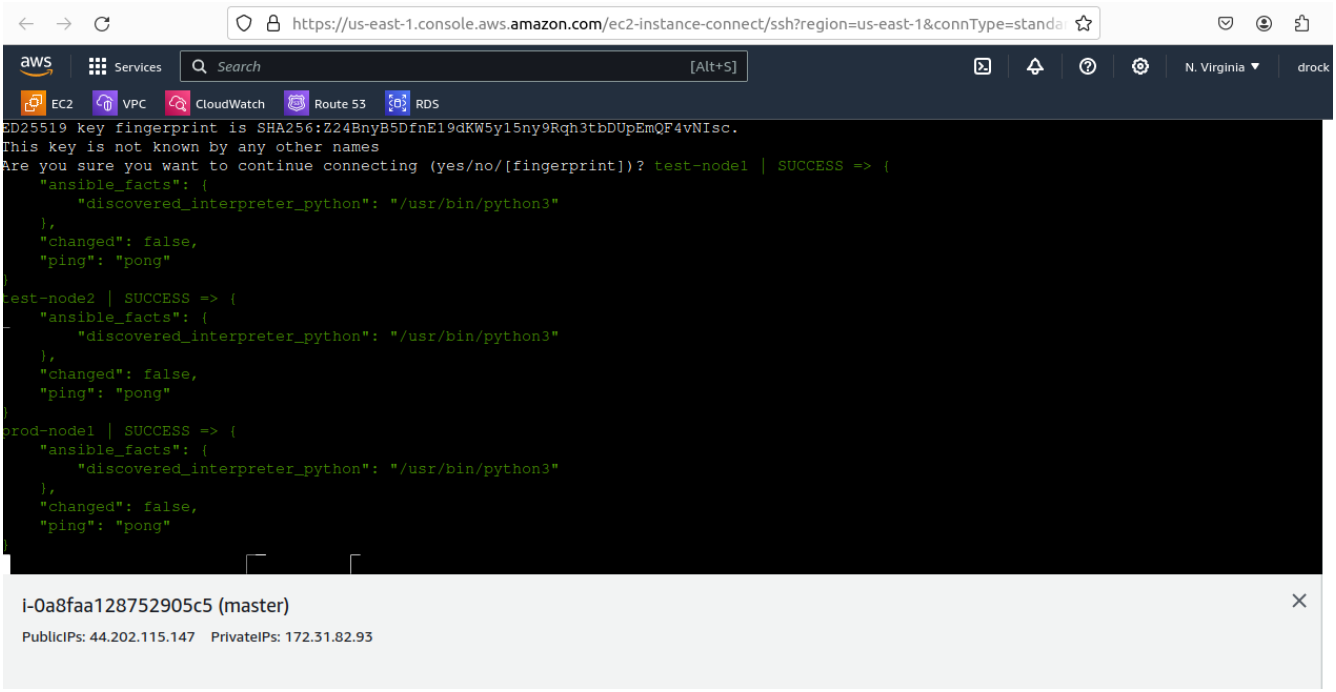
CREATE INVENTORY FILE
sudo nano /etc/ansible/hosts

[test]
test-node1 ansible_host=54.161.135.205
test-node2 ansible_host=54.211.200.169

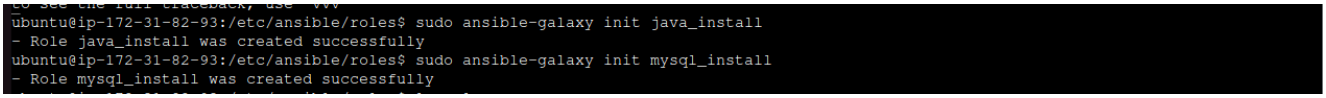
[prod]
prod-node1 ansible_host=54.166.156.212
prod-node2 ansible_host=3.92.45.111

PING ALL THE HOSTS

ansible -m ping all



ROLES CREATIONS



CREATE THE 2 ROLES

/etc/ansible/roles

sudo ansible-galaxy init java_install
sudo ansible-galaxy init mysql_install
.....
ROLE1

mkdir -p roles/java_install/tasks

(mkdir -p roles/java_install/tasks..... is used to create the directory structure for an Ansible role.)

sudo nano roles/java_install/tasks/main.yml..... (to edit the main.yml file inside the tasks directory.)

OR
cd /etc/ansible/roles/java_install/tasks

Edit the main.yml file

sudo nano main.yml

.....

```
---
- name: Install Java
  become: yes
  apt:
    name: openjdk-11-jdk
    state: present
```
.....

ROLE2

mkdir -p roles/mysql_install/tasks .....
sudo nano roles/mysql_install/tasks/main.yml

OR
cd /etc/ansible/roles/mysql_install/tasks
sudo nano main.yml

```
---
- name: Install MySQL Server
  become: yes
  apt:
    name: mysql-server
    state: present
```

.....

Create the service.yml Playbook:

cd /etc/ansible/roles
sudo nano service.yml

```
---
- name: Install Services
  hosts: all
  become: yes
  roles:
    - role: java_install
    - role: mysql_install
```

cd /etc/ansible/roles
ansible-playbook service.yml

```
ubuntu@ip-172-31-82-93:~$ cd /etc/ansible/roles
ubuntu@ip-172-31-82-93:/etc/ansible/roles$ ansible-playbook service.yml

PLAY [Install Services] ***************************************************************************************************************************

TASK [Gathering Facts] ****************************************************************************************************************************
ok: [prod-node3]
ok: [test-node2]
ok: [test-node1]
ok: [prod-node4]

PLAY RECAP ****************************************************************************************************************************************
prod-node3                 : ok=1    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
prod-node4                 : ok=1    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
test-node1                 : ok=1    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0
test-node2                 : ok=1    changed=0    unreachable=0    failed=0    skipped=0    rescued=0    ignored=0

ubuntu@ip-172-31-82-93:/etc/ansible/roles$
```

i-0a8faa128752905c5 (master)

PublicIPs: 44.202.115.147 PrivateIPs: 172.31.82.93