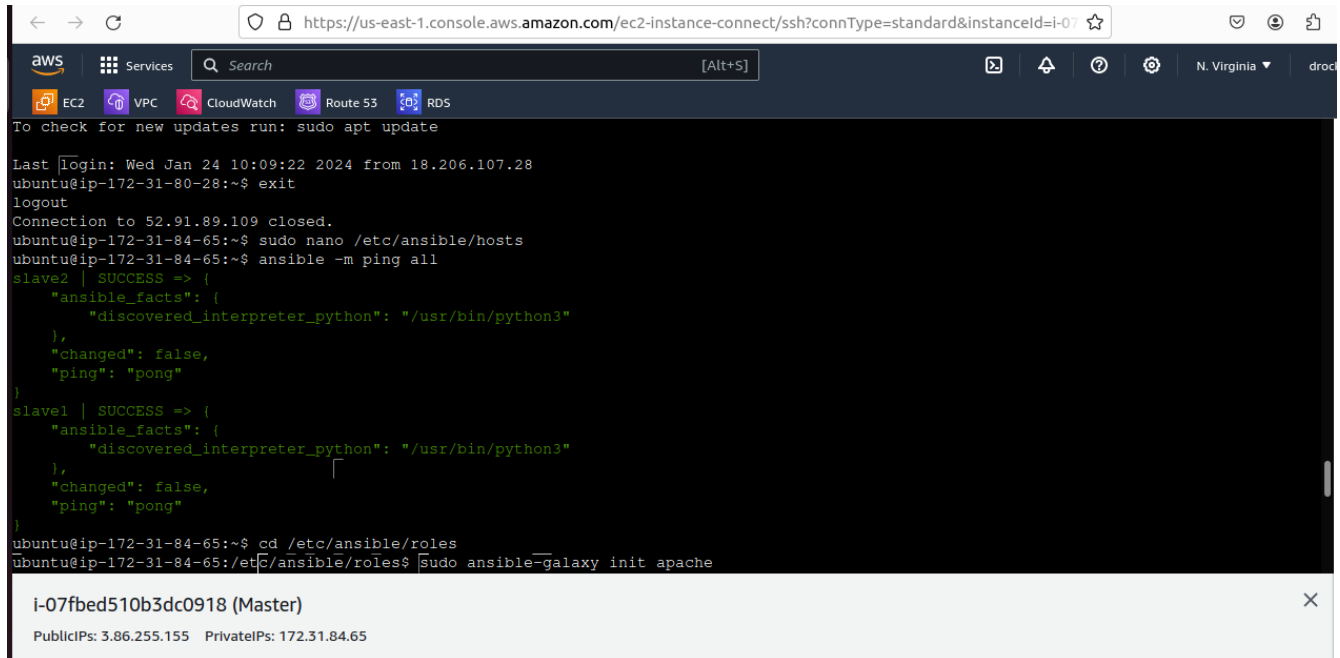1. Create 2 Ansible roles
2. Install Apache2 on slave1 using one role and NGINX on slave2 using the other role
3. Above should be implemented using different Ansible roles

MAKE 2 ROLES:APACHE AND NGINX

cd /etc/ansible/roles
sudo ansible-galaxy init apache

cd apache/tasks
sudo nano main.yml

```
---
- name: Install Apache2
  apt:
    name: apache2
    state: present
```

....

cd /etc/ansible/roles
sudo ansible-galaxy init nginx

cd nginx/tasks
sudo nano main.yml

```
---
- name: Install NGINX
  apt:
    name: nginx
    state: present
```


....

Create the service.yml Playbook:

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

```
---
- name: Install Services
  hosts: all
  become: true
  roles:
    - role: apache
      when: inventory_hostname == 'slave1'
    - role: nginx
      when: inventory_hostname == 'slave2'
```

```
ansible-playbook service.yml
```

```
        "ping": "pong"
}
slave1 | SUCCESS => {
    "ansible_facts": {
        "discovered_interpreter_python": "/usr/bin/python3"
    },
    "changed": false,
    "ping": "pong"
}
ubuntu@ip-172-31-84-65:~$ cd /etc/ansible/roles
ubuntu@ip-172-31-84-65:/etc/ansible/roles$ sudo ansible-galaxy init apache
- Role apache was created successfully
ubuntu@ip-172-31-84-65:/etc/ansible/roles$ cd apache/tasks
ubuntu@ip-172-31-84-65:/etc/ansible/roles/apache/tasks$ sudo nano main.yml
ubuntu@ip-172-31-84-65:/etc/ansible/roles/apache/tasks$ cd
ubuntu@ip-172-31-84-65:~$ cd /etc/ansible/roles
ubuntu@ip-172-31-84-65:/etc/ansible/roles$ sudo ansible-galaxy init nginx
- Role nginx was created successfully
ubuntu@ip-172-31-84-65:/etc/ansible/roles$ cd nginx/tasks
ubuntu@ip-172-31-84-65:/etc/ansible/roles/nginx/tasks$ sudo nano main.yml
ubuntu@ip-172-31-84-65:/etc/ansible/roles/nginx/tasks$ cd
ubuntu@ip-172-31-84-65:~$ cd /etc/ansible/roles
ubuntu@ip-172-31-84-65:/etc/ansible/roles$ sudo nano service.yml
ubuntu@ip-172-31-84-65:/etc/ansible/roles$ ansible-playbook service.yml
```

i-07fbed510b3dc0918 (Master)

PublicIPs: 3.86.255.155   PrivateIPs: 172.31.84.65

```
ubuntu@ip-172-31-84-65:/etc/ansible/roles$ ^C
ubuntu@ip-172-31-84-65:/etc/ansible/roles$ cd nginx/tasks
ubuntu@ip-172-31-84-65:/etc/ansible/roles/nginx/tasks$ sudo nano main.yml
ubuntu@ip-172-31-84-65:/etc/ansible/roles/nginx/tasks$ cd
ubuntu@ip-172-31-84-65:~$ cd /etc/ansible/roles
ubuntu@ip-172-31-84-65:/etc/ansible/roles$ ansible-playbook service.yml

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

TASK [Gathering Facts] ********************************************************************************
ok: [slave2]
ok: [slave1]

TASK [apache : Install Apache2] ********************************************************************************
skipping: [slave2]
changed: [slave1]

TASK [nginx : Install NGINX] ********************************************************************************
skipping: [slave1]
changed: [slave2]

PLAY RECAP ********************************************************************************
slave1                     : ok=2    changed=1    unreachable=0    failed=0    skipped=1    rescued=0    ignored=0
slave2                     : ok=2    changed=1    unreachable=0    failed=0    skipped=1    rescued=0    ignored=0
```

i-07fbed510b3dc0918 (Master)

PublicIPs: 3.86.255.155   PrivateIPs: 172.31.84.65

54.159.16.163

Apache2 Default Page

Ubuntu

It works!

This is the default welcome page used to test the correct operation of the Apache2 server after installation on Ubuntu systems. It is based on the equivalent page on Debian, from which the Ubuntu Apache packaging is derived. If you can read this page, it means that the Apache HTTP server installed at this site is working properly. You should **replace this file** (located at `/var/www/html/index.html`) before continuing to operate your HTTP server.

If you are a normal user of this web site and don't know what this page is about, this probably means that the site is currently unavailable due to maintenance. If the problem persists, please contact the site's administrator.

Configuration Overview

Ubuntu's Apache2 default configuration is different from the upstream default configuration, and split into several files optimized for interaction with Ubuntu tools. The configuration system is **fully documented in /usr/share /doc/apache2/README.Debian.gz**. Refer to this for the full documentation. Documentation for the web server itself can be found by accessing the **manual** if the apache2-doc package was installed on this server.

The configuration layout for an Apache2 web server installation on Ubuntu systems is as follows:

```
/etc/apache2/
|-- apache2.conf
|       `--  ports.conf
|-- mods-enabled
|       |-- *.load
|       `-- *.conf
|-- conf-enabled
|       `   * conf
```

Just a moment...   52.91.89.109

Welcome to nginx!

If you see this page, the nginx web server is successfully installed and working. Further configuration is required.

For online documentation and support please refer to nginx.org.
Commercial support is available at nginx.com.

Thank you for using nginx.