

Ansible assignment

Tasks To Be Performed:

1. Setup Ansible cluster with 3 nodes
2. On slave 1 install Java
3. On slave 2 install MySQL server

Do the above tasks using Ansible Playbooks

ANSWER:-

First create the aws m/c

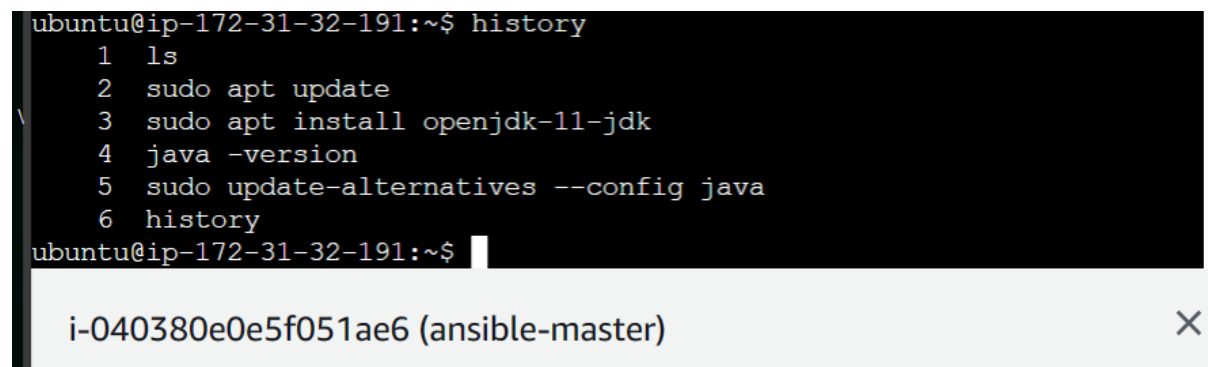
Create the ansible inventory file with " inventory.ini"

[cluster]

master ansible_host=master-node-ip

slave1 ansible_host=slave1-node-ip

slave2 ansible_host=slave2-node-ip

A terminal window with a black background and white text. The prompt is 'ubuntu@ip-172-31-32-191:~\$'. The history shows: 1 ls, 2 sudo apt update, 3 sudo apt install openjdk-11-jdk, 4 java -version, 5 sudo update-alternatives --config java, 6 history. Below the terminal, a grey bar contains the text 'i-040380e0e5f051ae6 (ansible-master)' and a close button 'X' on the right.

```
ubuntu@ip-172-31-32-191:~$ history
1  ls
2  sudo apt update
3  sudo apt install openjdk-11-jdk
4  java -version
5  sudo update-alternatives --config java
6  history
ubuntu@ip-172-31-32-191:~$
```

i-040380e0e5f051ae6 (ansible-master) X

Create the yaml file to create the ansible playbook

Slave1.yml

- name: install java on slave 1
hosts: slave1
become: yes

tasks:

- name: update apt cache
apt:
update_cache: yes

- name: install java
apt:
name: openjdk-11-jdk
state: present

NEXT

create a mysql server in th slave2.yml

- name: Install MySQL Server on Slave 2

hosts: slave2

become: yes

tasks:

- name: Update apt cache

apt:

update_cache: yes

- name: Install MySQL Server

apt:

name: mysql-server

state: present

so now you can run the playbook by using the ansible-playbook

ls

```
48 ls
49 sudo apt install software-properties-common
50 sudo apt-add-repository ppa:ansible/ansible
51 sudo apt-get upgrade
52 ssh ubuntu@13.233.200.36
53 clear
54 cd .ssh
55 ls
56 cat id_rsa.pub
57 ssh-keygen
58 ls
59 cat id_rsa.pub
60 ssh ubuntu@13.233.200.36
61 cat id_rsa.pub
62 ssh ubuntu@13.233.200.36
63 ls
64 exit
```

Ansible-playbook -i inventory.ini

So we can exextive the command to ssh keys to ansible to access the nodes

Assignment-4

Tasks To Be Performed:

1. Use the previous deployment of Ansible cluster
2. Configure the files folder in the role with index.html

which should be replaced with the original index.html

All of the above should only happen on the slave which has NGINX installed using the role.

Ans:

So now create the ansible the playbook with a conditional task and role directory structure

So now typ---

- name: Copy index.html to NGINX server

hosts: nginx_server # Replace with the actual group or host that has NGINX installed

become: yes

tasks:

- name: Copy index.html

copy:

src: files/index.html

dest: /usr/share/nginx/html/index.html # Modify the destination path as needed

notify:

- Restart NGINX

handlers:

- name: Restart NGINX

service:

name: nginx

state: restarted the index.html for file folder directory

```
---
- name: Copy index.html to NGINX server
  hosts: nginx_server # Replace with the actual group or host
  become: yes

  tasks:
    - name: Copy index.html
      copy:
        src: files/index.html
        dest: /usr/share/nginx/html/index.html # Modify the d
      notify:
        - Restart NGINX

  handlers:
    - name: Restart NGINX
      service:
        name: nginx
```

Next create the file in the ssh key to generate the html folder to create the task with
Nginx installed in the place of nginx host

```
86 main.yml
87 main.yml
88 ansible-playbook index.yml
89 ansible-playbook play.yml
90 sudo nano index.html
91 sudo nano configure_index.html
92 clear
93 ansible-playbook -i inventory.ini configure_index.yml
94 ansible-playbook index.html
```

So create the role of the index of nginx server

```
---

- name: Configure index.html on NGINX server
  hosts: cluster
  become: yes
```

roles:

- my_role

In last command to check the ansible-playbook to config_index.yml

When we run in ip address nginx we can run directly in with index.html