9.Configuration Management using Ansible

Installing Ansible on AWS:

It involves following steps

1. Install Ansible on Master/Control node
2. Configure SSH access to Ansible Client/Slave
3. Setting up ansible Host and Test connection

1. Install Ansible on Master/Control node

Set Up in AWS Account:

- Lunch 2 instances of **Ubuntu** t2.micro type and allow all traffic.
- Rename instances one as Master and One as Client

Using Powershell

Connect to EC2 instances using following command

ssh -i "<path of pem key>" <user_name>@<Private_dns>

On Master Node:

Install ansible using following commands

Ref: https://docs.ansible.com/ansible/latest/installation_guide/installation_distros.html

```
$ sudo apt update
$ sudo apt install software-properties-common
$ sudo add-apt-repository –yes –update ppa:ansible/ansible
$ sudo apt install ansible
```

On Client Node

Install Python using following commands

```
$ sudo apt update
$ sudo apt install python3
```

2. Configure SSH access to Ansible Client/Slave

Keyless Access from Master to Slave/ Control node to Host nodes:

Generate ssh key on Master node:

```
      $ Ssh-keygen
      $ cat id_rsa.pub

   Copy Publick key(the output of above command) of Master node into
   authorized_keys file on client node
   🕐 Authorized_keys file is available in .ssh folder

   To Test: on master node run the following command
   Sudo ssh <username>@<private ip of client node>
```

3. Setting up ansible Host and Test connection

On Master Node:

Sudo vi /etc/ansible/hosts

Add the following lines at the end

```
   [<groupname>]
   <client_name>  ansible_ssh_host=<private_ip>  ansible_ssh_user=<username>
   ansible_ssh_pass=<password>
```

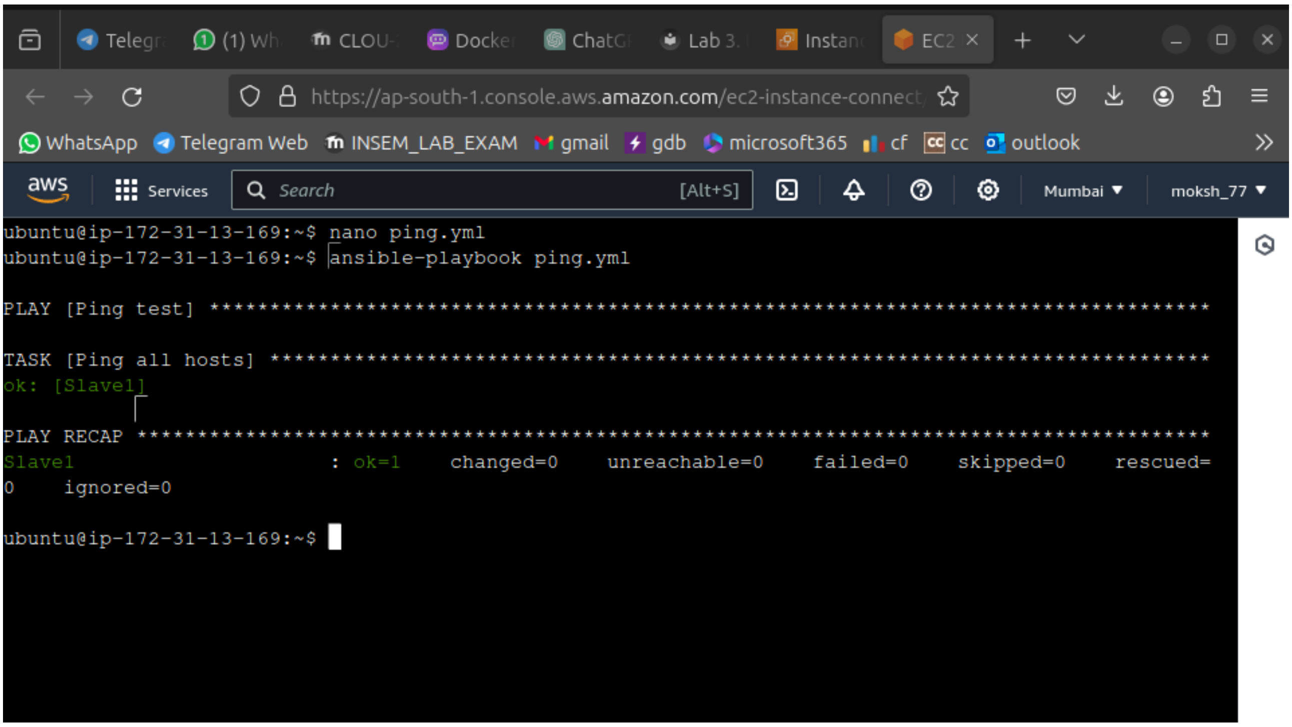
Ex:

```
   [httpd_servers]
   Client1 ansible_ssh_host=10.5.34.29 ansible_ssh_user=ubuntu
```

```
Client2 ansible_ssh_host=10.5.34.178 ansible_ssh_user=ubuntu
```

Check Master is communicating with Slave or not with the following command

```
Ansible -m ping all/groupname/hostname
```



```
ubuntu@ip-172-31-13-169:~$ nano ping.yml
ubuntu@ip-172-31-13-169:~$ ansible-playbook ping.yml

PLAY [Ping test] ***************************************************************

TASK [Ping all hosts] **********************************************************
ok: [Slave1]

PLAY RECAP *********************************************************************
Slave1                     : ok=1    changed=0    unreachable=0    failed=0    skipped=0    rescued=
0    ignored=0

ubuntu@ip-172-31-13-169:~$ 
```