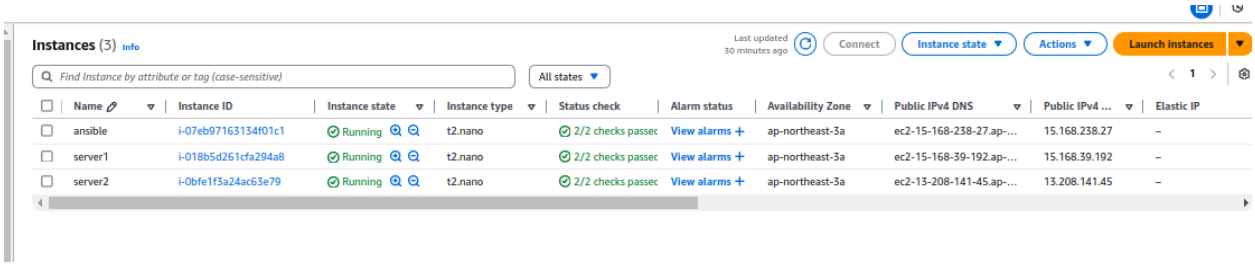
How to setup Ansible and SSH keys in AWS

1) Create 3 AWS ec2 instance in ubuntu



First instance - Ansible

Two instance - Server1 and server2

2) Login in Ansible EC2 instance and use these commands

→ switch as root

sudo su -

→ update packages

apt update -y

→ run the following command to include the official project's PPA (personal package archive) in your system's list of source

apt-add-repository ppa:ansible/ansible

→ Next, refresh your system's package index so that it is aware of the packages available in the newly included PPA:

apt update -y

→ Following this update, you can install the Ansible software with:

apt install ansible -y

→ Check ansible version

ansible --version

→ Go the hosts and add your server1 and server2

nano /etc/hosts

```
  GNU nano 6.2                                                    /etc/hosts
127.0.0.1 localhost

15.168.39.192 server1
13.208.141.45 server2



# The following lines are desirable for IPv6 capable hosts
::1 ip6-localhost ip6-loopback
fe00::0 ip6-localnet
ff00::0 ip6-mcastprefix
ff02::1 ip6-allnodes
ff02::2 ip6-allrouters
ff02::3 ip6-allhosts
```

Add : **public IP server 1**

public IP server 2

→ Generate ssh key from ansible server

And

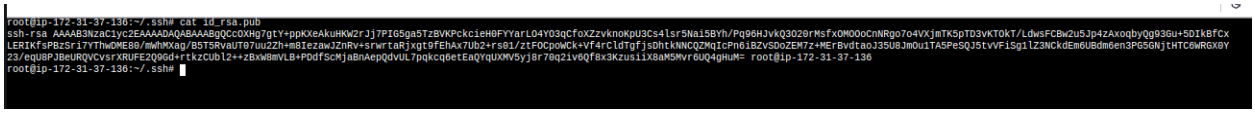
Press - Enter → Enter → Enter

```
root@ip-172-31-37-136:~# cd .ssh/
root@ip-172-31-37-136:~/.ssh# ls
authorized_keys  id_rsa  id_rsa.pub  known_hosts  known_hosts.old
root@ip-172-31-37-136:~/.ssh#
```

Your you can see ssh keys of public key and private key

→ Copy the public key (id_rsa.pub) and paste it in athuorized_key on server1 and server2

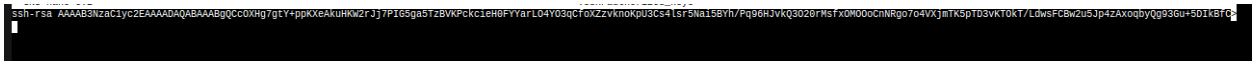
cat id_rsa.pub



→ Go to the server 1 and server 2

→ Login server1 and paste this public key in .ssh/athuorized_keys

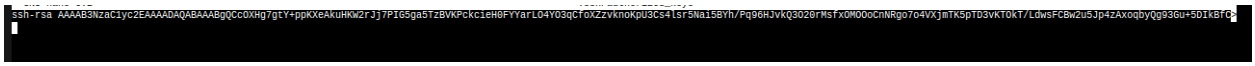
nano .ssh/authorized_keys



Save it and come out from the shell

→ Login server1 and paste this public key in .ssh/athuorized_keys

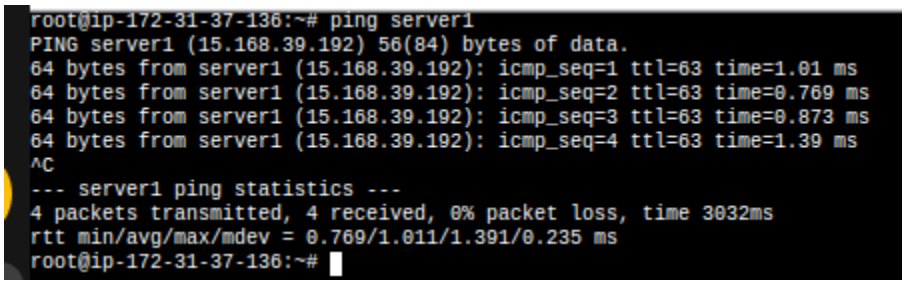
nano .ssh/authorized_keys



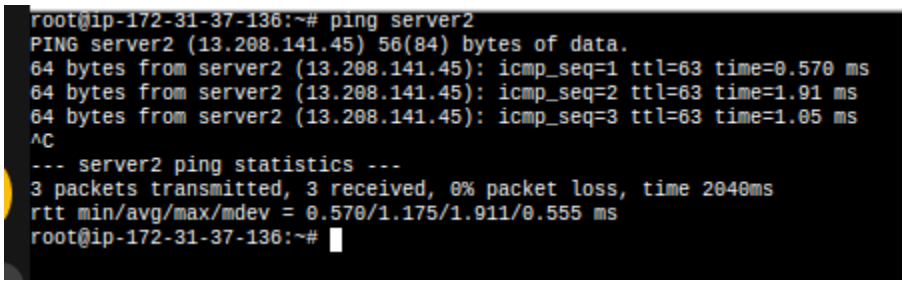
Save it and come out from the shell

→ Return to the Ansible server and check if the ping is working on server1 and server2.

ping server1



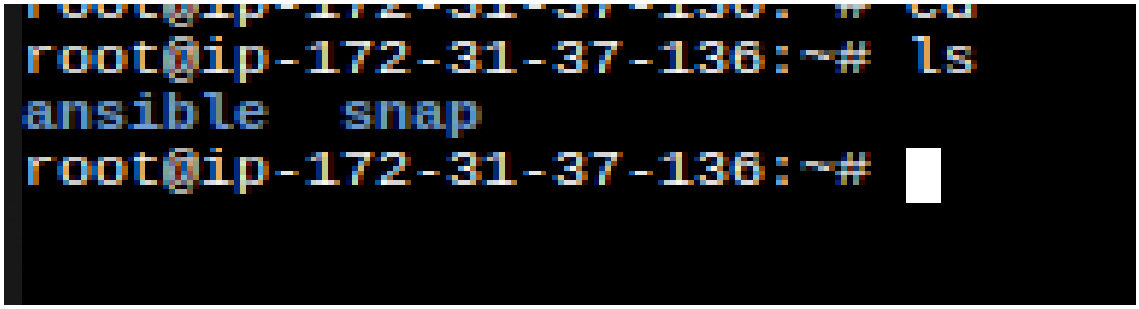
ping server2



It is working fine in Ansible server

→ Create a directory in the name of Ansbile

mkdir ansible



→ Get in the Ansible directory

cd ansible

→ Create a inventory file and add these hosts

nano inventory

[webservers]

server1

server2 (save it and come out from the shell)

cat inventory

→ Create ansible.cfg file and these lines

nano ansible.cfg

[defaults]

inventory=/root/ansible/inventory

remote_user=ubuntu

ask_pass=false (save it and come out from the shell)

→ For testing purpose, we need to install nginx in server 1 and apache in server2 from ansible server

→ Create yaml file for install nginx and apache in server1 and server2

nano install_webservers.yml

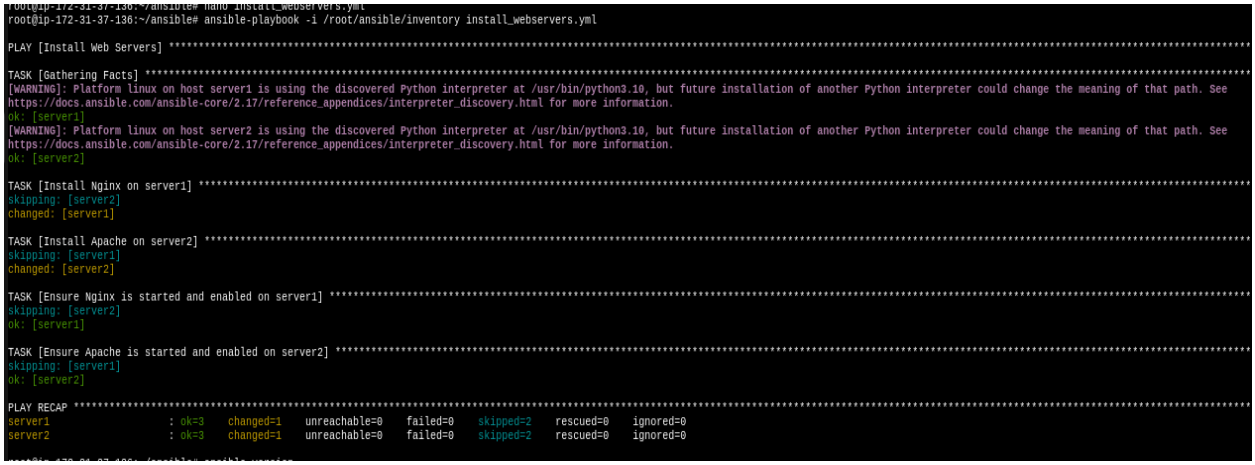
```
---
- name: Install Web Servers
  hosts: webservers
  become: true
  tasks:

    - name: Install Nginx on server1
      apt:
        name: nginx
        state: present
      when: inventory_hostname == 'server1'

    - name: Install Apache on server2
      apt:
        name: apache2
        state: present
      when: inventory_hostname == 'server2'

    - name: Ensure Nginx is started and enabled on server1
      service:
        name: nginx
        state: started
        enabled: yes
      when: inventory_hostname == 'server1'

    - name: Ensure Apache is started and enabled on server2
      service:
        name: apache2
        state: started
```

enabled: yes
when: inventory_hostname == 'server2'

(save it and come out from the shell)

→run ansible yml file following this command

ansible-playbook -i /root/ansible/inventory install_webservers.yml



Here you can see installing nginx and apache each servers and you can test by copy each servers ip and paste it browser.