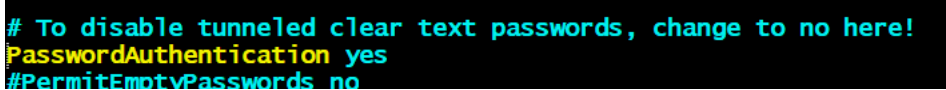


Ansible Setup

1. Create Controller Instance in AWS EC2
Edit inbound rules under Security Group, and add:
 - a. TCP 8080
 - b. HTTP
2. Create ManagedNode Instance in AWS EC2
3. Connect to Controller and ManagedNode separately
4. Goto ManagedNode and run the below commands:
 - a. `sudo apt-get update`
 - b. `sudo passwd ubuntu` (give password as ubuntu)
 - c. `sudo vim /etc/ssh/sshd_config`


```
# To disable tunneled clear text passwords, change to no here!  
PasswordAuthentication yes  
#PermitEmptyPasswords no
```

Save and quit using Esc:wq
 - d. `sudo service ssh restart`
5. Goto to Controller and run below commands
 - a. `sudo apt-get update`
 - b. `sudo apt-get install software-properties-common`
 - c. `sudo apt-add-repository ppa:ansible/ansible`
 - d. `sudo apt-get update`
 - e.
 - f. `sudo apt-get install -y ansible`
 - g. `ansible --version`
 - h. `sudo ls /etc/ansible/`
**ensure hosts file is there*

6. `ssh-keygen -t rsa -b 4096`

It will ask for location, just press enter

It will ask for passphrase - give some text and remember it

7. `sudo ls .ssh/` (`sudo ls -h /home/ubuntu/.ssh/`)
ensure you have `id_rsa.pub` file

8. `sudo vim .ssh/id_rsa.pub`

Copy the entire content to a notepad so that it can be copied into `.ssh/authorizedkeys` file in

ManagedNode

Looks like:

```
ssh-  
rsaAAAAB3NzaC1yc2EAAAADAQABAAQGC2e11Eb8j9N56h2QIcfca3ce+o0II+er+YIjhVFW4ZKpuVOX3t  
ZbFY2eOPic8YB3d2gJQWHQIa+43e0/grfseFC301DPJUIovxNwLbxRkxqzKxSGZ8dGx1WfAXzpUNmX7OB4  
+jWOauTqqoDDgsb+QwwcDumnsYSmFW43DZu7rFRXCo9rex1X5w1O2oOHea/YY0FXNHu9BnQwwq6juICmxCw  
e1paaIG/1k4n+ByzxjrWRIjv7ZhNrYYoNJ3n/hI15g4vIped5BSKQmTdnGUCJXZwpd9rrvYNPa0fe6733ER  
skbaH3PYZ1rCDqe0Ki jXGdD7Q5y4uXQdkeU/cCzrDaqvi6fu90EeqP1kMg2m6qbipHLJ0YCK5MsasYhjmbt  
fUnrNeOTELEDUzhe5QdC1mf9mLCh5gMBEKq/amdjoMN4+fJQM2pBHUSZ1TWQ41GzjTCOQWXLE1tgw4L7mwu  
T4fm/bxfrINE/9S4sb3tWBUJEVfxaWZwDxD1I5MIHHnYv7+E= ubuntu@ip-172-31-4-180
```

9. Open ManagedNode and run the below commands

`sudo vim .ssh/authorized_keys`

Paste the rsa key in this file, and save it using Esc:wq

10. To check whether ssh authentication is working run the below command

`ssh -v ubuntu@ManagedNode ip address`

Once connected successfully, come out from using exit command

11. Open Controller Node and edit the hosts file located at /etc/ansible/hosts using below command:

```
sudo vim /etc/ansible/hosts
```

add IP address of Managed node and save the file using Esc:wq

12. Now ready to run the ansible commands

```
ansible all -i /etc/ansible/hosts -m command -a 'free'
```

```
ansible all -i /etc/ansible/hosts -m command -a 'touch f1 f2 f3'
```

```
ansible all -m apt -a 'name=git state=present' -b
```

```
ansible all -m apt -a 'name=git state=absent' -b
```

```
ansible all -m apt -a 'name=tomcat8 state=present update_cache=yes' -b (use tomcat9 )
```

```
ansible all -m file -a 'name=/tmp/file0 state=touch'
```