**INSTALLATION OF ANSIBLE ON LINUX**

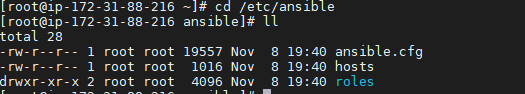
yum-config-manager --enable epel

yum repolist

yum install ansible -y

cd /etc/ansible

ll



vi hosts

[server]

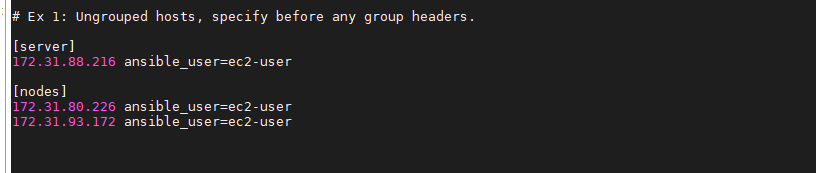
172.31.88.216 ansible\_user=ec2-user

[nodes]

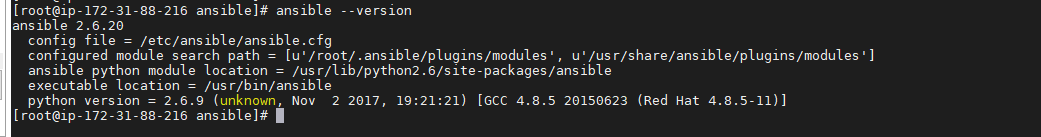
172.31.80.226 ansible\_user=ec2-user

172.31.93.172 ansible\_user=ec2-user

* Use Private IP’s



ansible --version

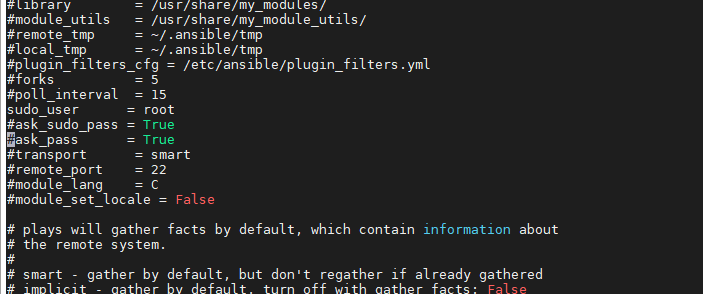


* import key file into linux machine
* Need to copy Primary key to Linux machine

chmod 600 Naresh\_virginia\_Nov.pem

vi ansible.cfg

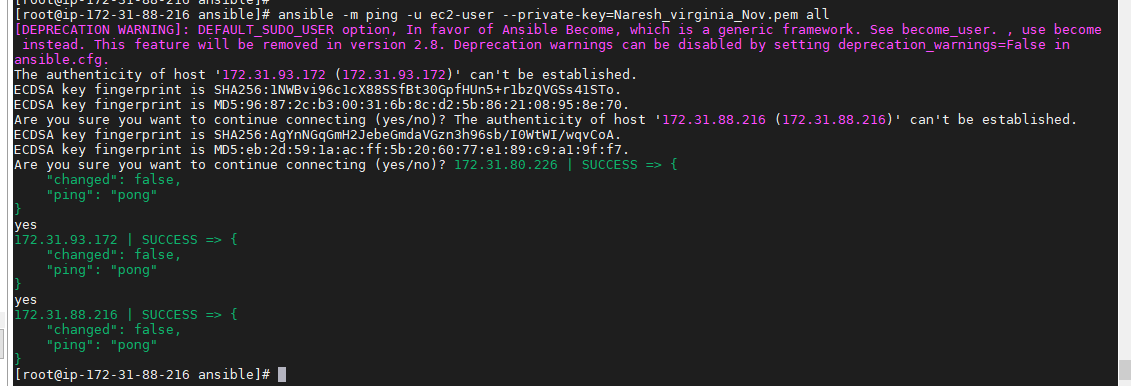
* Remove ‘#’ symbol before sudo\_user:



ansible -m ping -u ec2-user --private-key=Naresh\_virginia\_Nov.pem all

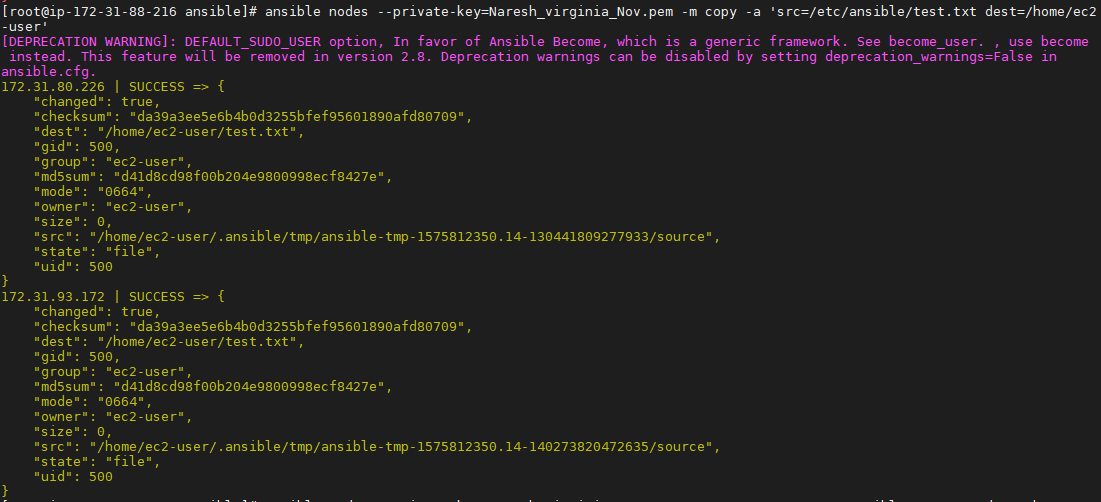
(or)

ansible -m ping --private-key=Naresh\_virginia\_Nov.pem all



**Copy Module:**

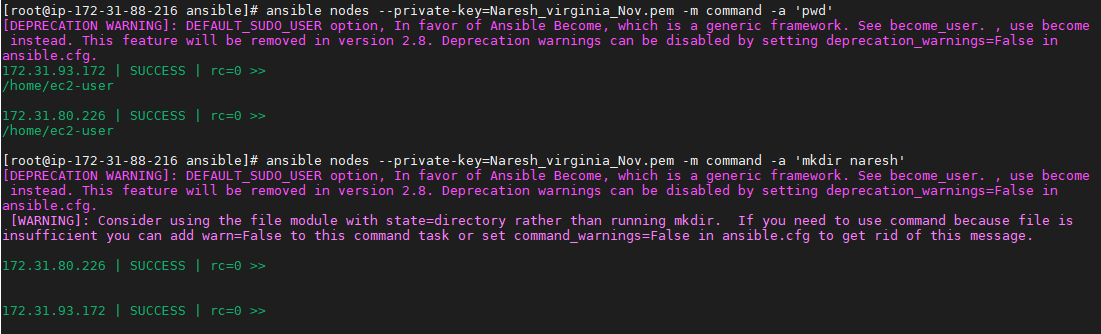
ansible nodes --private-key=Naresh\_virginia\_Nov.pem -m copy -a 'src=/etc/ansible/test.txt dest=/home/ec2-user'



**Command Module:**

ansible nodes --private-key=Naresh\_virginia\_Nov.pem -m command -a 'pwd'

ansible nodes --private-key=Naresh\_virginia\_Nov.pem -m command -a 'mkdir naresh'

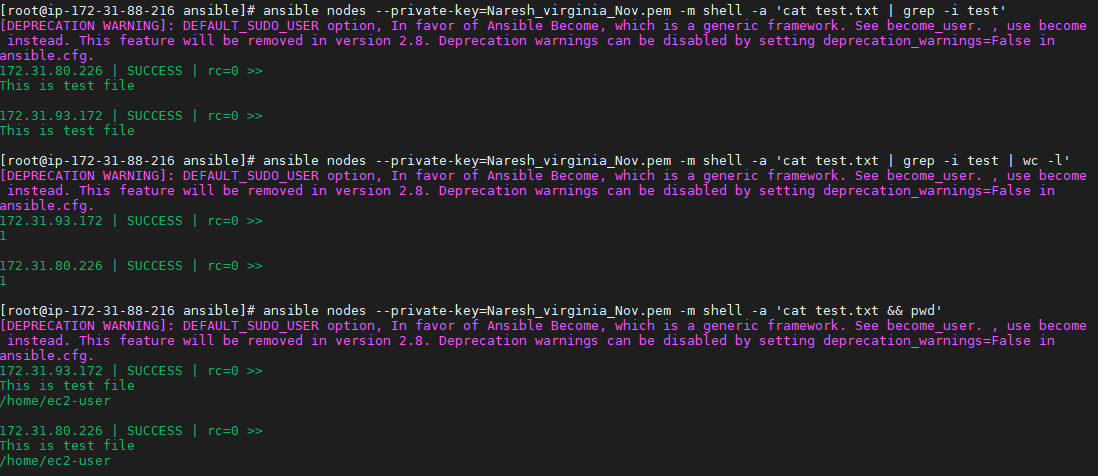


**Shall Module:**

ansible nodes --private-key=Naresh\_virginia\_Nov.pem -m shell -a 'cat test.txt | grep -i test'

ansible nodes --private-key=Naresh\_virginia\_Nov.pem -m shell -a 'cat test.txt | grep -i test | wc -l'

ansible nodes --private-key=Naresh\_virginia\_Nov.pem -m shell -a 'cat test.txt && pwd'



**File Module:**

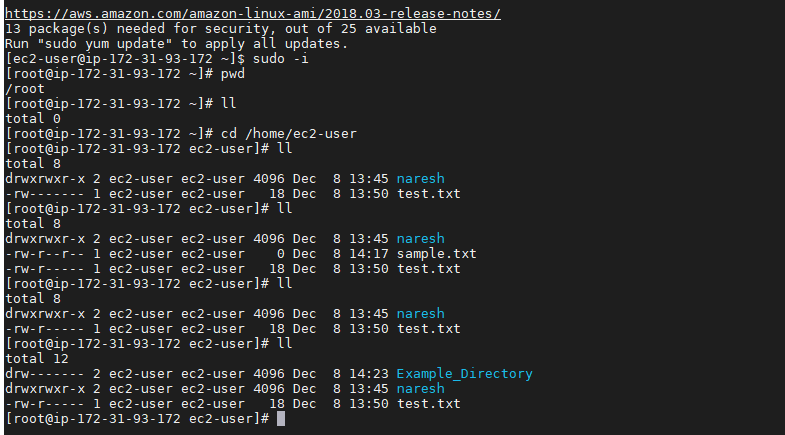
ansible nodes --private-key=Naresh\_virginia\_Nov.pem -m file -a 'dest=/home/ec2-user/test.txt mode=640'

If file is not there we need to use ‘**state**’ command

ansible nodes --private-key=Naresh\_virginia\_Nov.pem -m file -a 'dest=/home/ec2-user/sample.txt state=touch mode=644'

I have a file and need to remove file to use ‘**absent**’ command

ansible nodes --private-key=Naresh\_virginia\_Nov.pem -m file -a 'dest=/home/ec2-user/sample.txt state=absent mode=644'



**Write a Play book using File Module**

* Play books are writing for executing multiple tasks at a time
* Play books are writing in ‘**.yml**’ file

vi Create\_file.yml

---

- hosts: nodes

tasks:

- name: Ansible Create file if it doesn't exist example

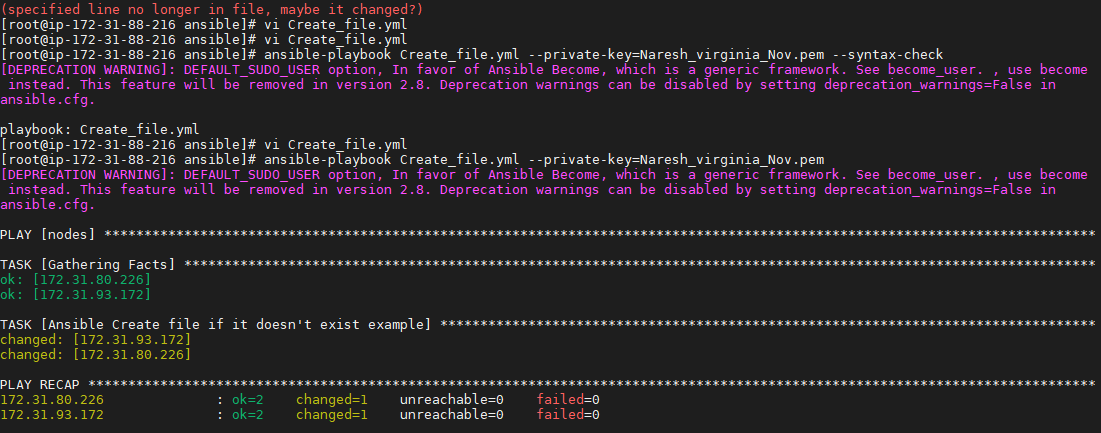
file:

path: "/home/ec2-user/devops.txt"

state: touch

ansible-playbook Create\_file.yml --private-key=Naresh\_virginia\_Nov.pem --syntax-check

ansible-playbook Create\_file.yml --private-key=Naresh\_virginia\_Nov.pem



**Create a file with content**

- hosts: nodes

tasks:

- name: Create file with content

copy:

dest: "/home/ec2-user/sample.txt"

content: |

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Bangalore

**Create Multiple Files**

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- hosts: nodes

tasks:

- name: Ansible Create Multiple files

file:

path: "/home/ec2-user/{{ item }}"

state: touch

mode: 0775

with\_items:

- access.log

- systemd.log

- properties.txt

- confile.conf

ansible-playbook Mutiple\_Files.yml -u ec2-user -i /etc/ansible/hosts --private-key=Naresh\_virginia\_Nov.pem

**Create multiple files with different permissions**

---

- hosts: nodes

tasks:

- name: Ansible Create Multiple files

file:

path: "/home/ec2-user/{{ item.location }}"

state: touch

mode: "{{ item.mode }}"

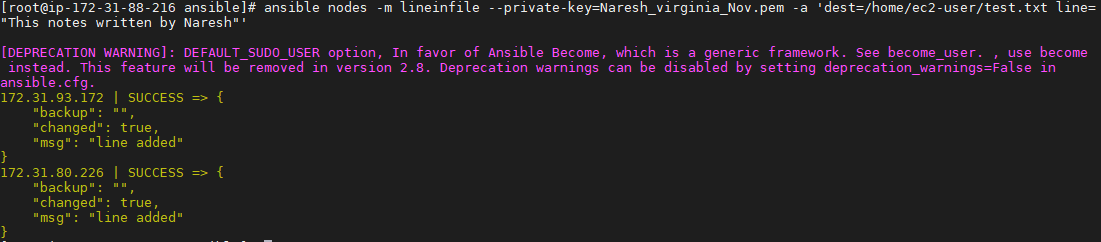
with\_items:

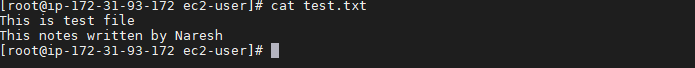
- { location: 'task1.txt',mode: '0566' }

- { location: 'task2.txt',mode: '0766' }

**LineInFile Module:**

ansible nodes -m lineinfile --private-key=Naresh\_virginia\_Nov.pem -a 'dest=/home/ec2-user/test.txt line="This notes written by Naresh"'





Line add in a file which is in node servers

**Yum Module:**

ansible nodes -b -m yum --private-key=Naresh\_virginia\_Nov.pem -a 'name=httpd state=present'

ansible nodes -b -m service --private-key=Naresh\_virginia\_Nov.pem -a 'name=httpd state=started'

**Download and Installation of Apache-Maven-3.6.3 with Ansible-Playbook**

---

- hosts: nodes

become: yes

tasks:

- name: download and extract apache-maven-3.6.3

unarchive:

src: http://apachemirror.wuchna.com/maven/maven-3/3.6.3/binaries/apache-maven-3.6.3-bin.tar.gz

dest: /opt

remote\_src: yes

- name: create file using touch command

file:

path: /etc/profile.d/maven.sh

state: absent

- name: create file using touch command

file:

path: /etc/profile.d/maven.sh

state: touch

mode: u+x

- name: Insert line in a file

lineinfile:

path: /etc/profile.d/maven.sh

line: "export PATH=/opt/apache-maven-3.6.3/bin:${PATH}"

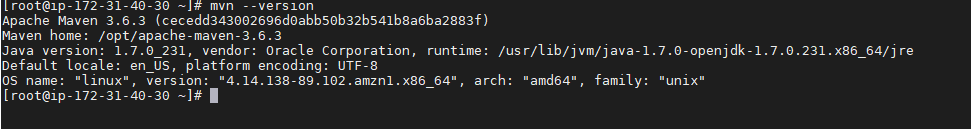
state: present

- name: run command for maven file

shell: nohup /etc/profile.d/maven.sh

--------------------------------------------------------------------------------------------------------------------

Checked in node whether Apache-maven installed or not



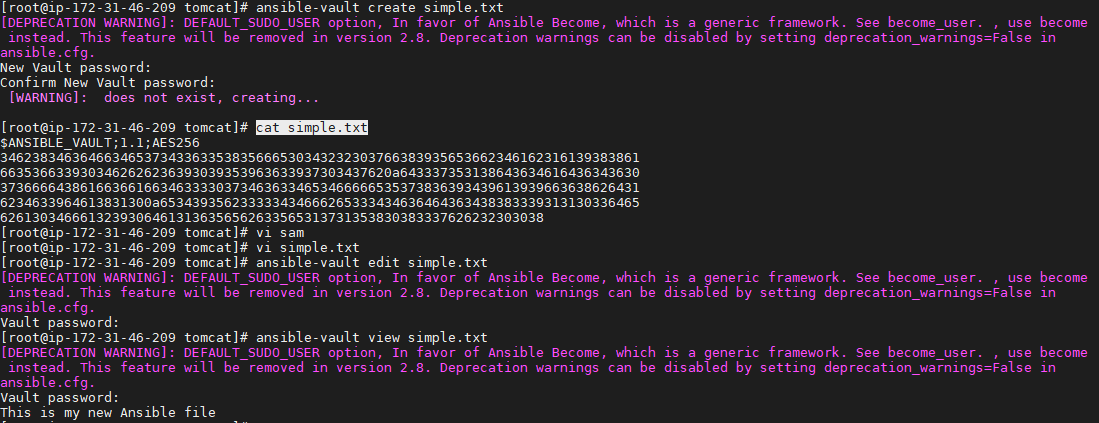
**Ansible-Vault:**

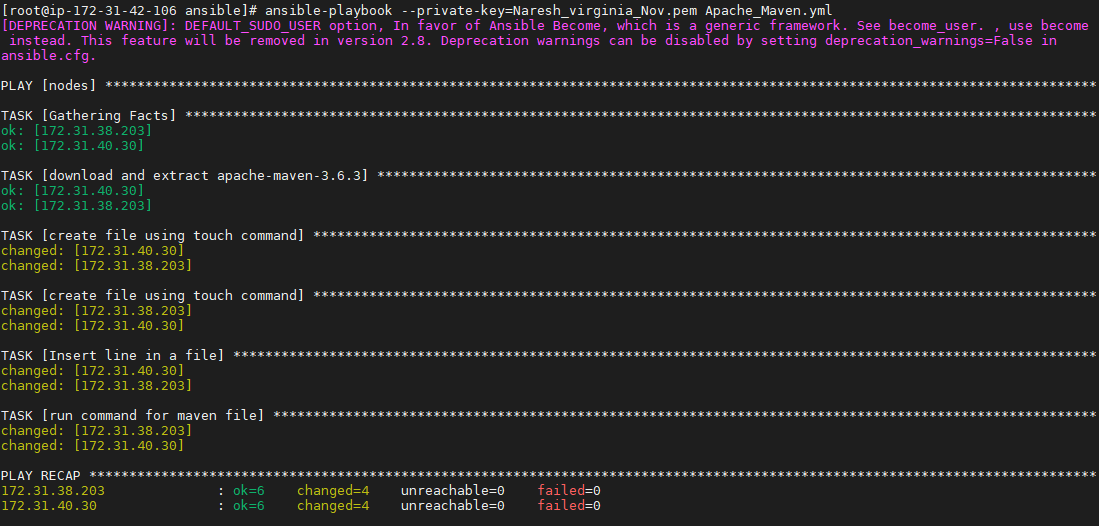
ansible-vault create simple.txt

cat simple.txt

ansible-vault edit simple.txt

ansible-vault view simple.txt



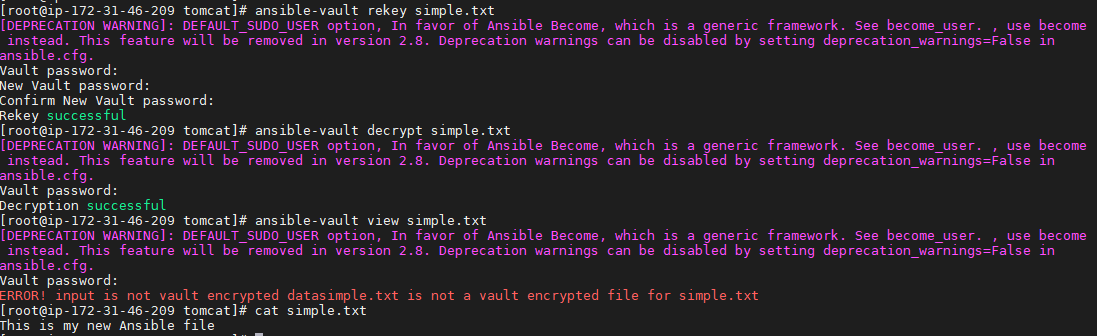


ansible-vault rekey simple.txt

ansible-vault decrypt simple.txt

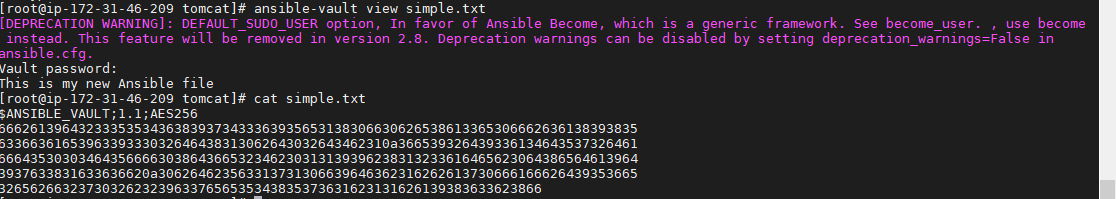
ansible-vault view simple.txt

cat simple.txt



ansible-vault view simple.txt

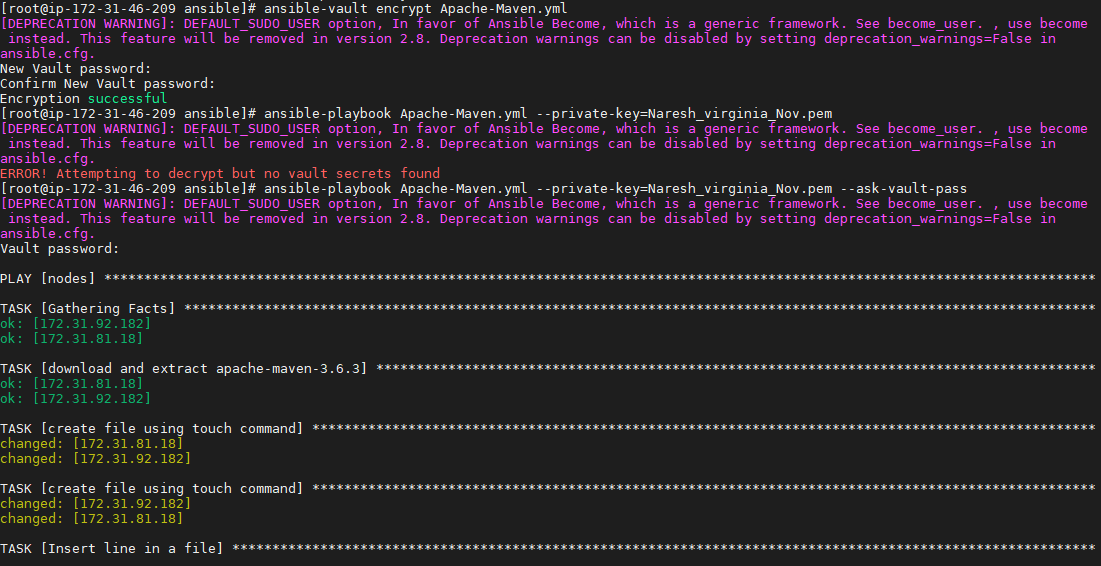
cat simple.txt



ansible-vault encrypt Apache-Maven.yml

ansible-playbook Apache-Maven.yml --private-key=Naresh\_virginia\_Nov.pem --ask-vault-pass

ansible-playbook Apache-Maven.yml --private-key=Naresh\_virginia\_Nov.pem --ask-vault-pass

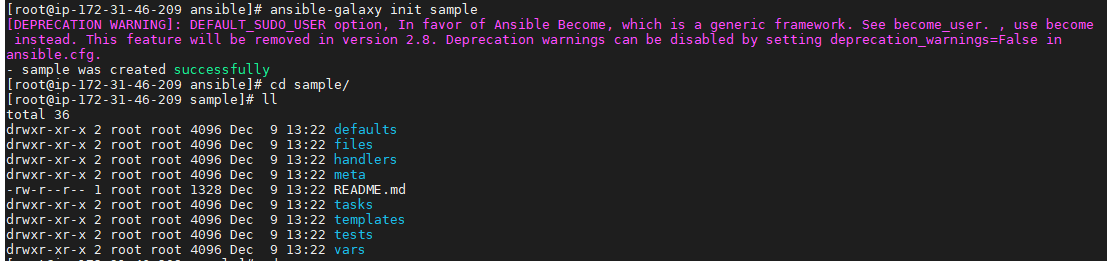


**Ansible-Roles:**

ansible-galaxy init sample

cd sample/

ll



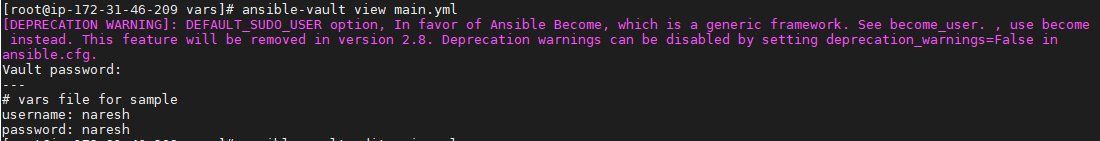
cd vars

ll

ansible-vault encrypt main.yml

cat main.yml

ansible-vault view main.yml

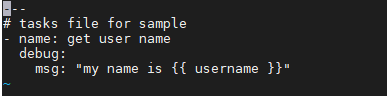


ansible-vault edit main.yml

cd ..

cd tasks

vi main.yml



ansible-playbook get\_vault\_data.yml --private-key=Naresh\_virginia\_Nov.pem --ask-vault-pass

