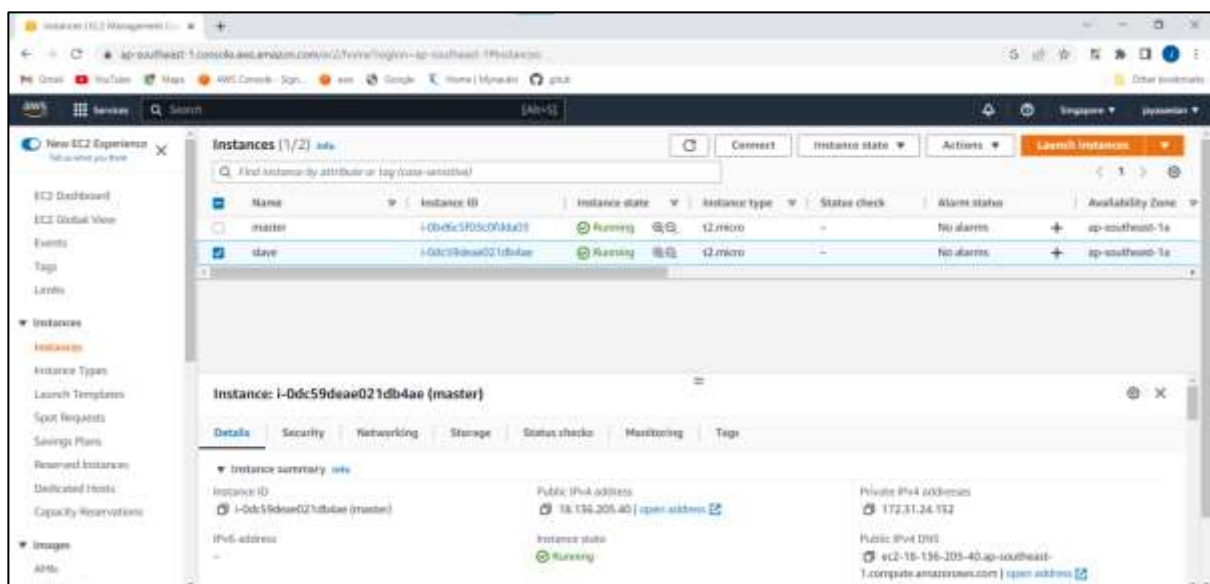# ANSIBLE VAULT

Ansible Vault is a feature that allows you to keep all your secrets safe. It can encrypt entire files, entire YAML playbooks or even a few variables.
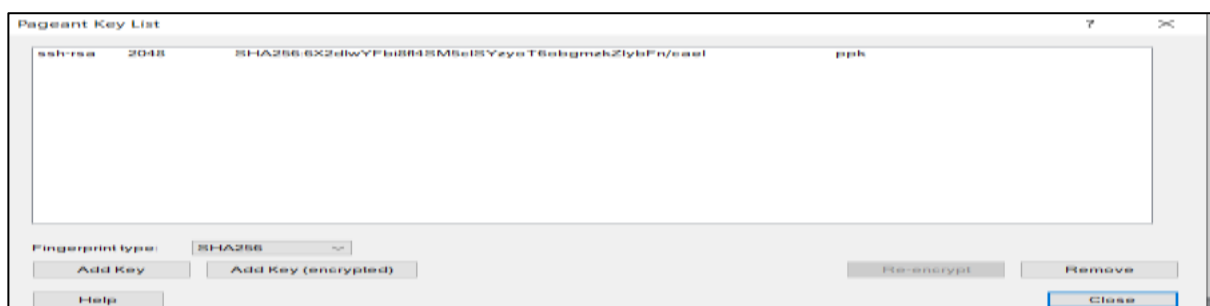
- ➢ Create
- ➢ Encrypt
- ➢ Decrypt
- ➢ View
- ➢ Edit
- ➢ Rekey

Step1:launch two ec2 instance at a time

Key(ppk)---->security(all tcp)---->launch instance

Step2:Key Add To Pagent

Step3:Login Master Server

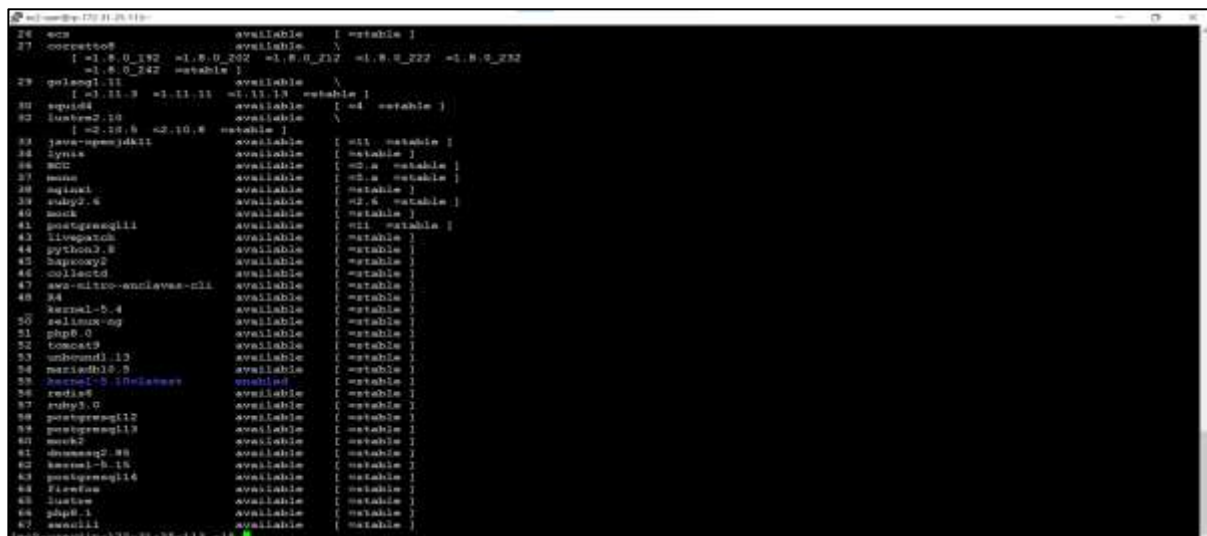Putty --->host(public ip) ---->auth(click allow agent forwarding) -->open

Step4:Install Python And Ansible Use Yum

#sudo yum install python –y --->it shown already install so version check

#python --version

#sudo yum install ansible –y --->can't install ansible it will shown alternate command to use install ansible

sudo amazon-linux-extras install ansible2

#ansible –version

Now we get host inventory file and configuration file

#cd /etc/ansible/

#ll   ---->it will shown ansible.cfg and hosts that move to /home/ec2-user/

sudo cp ansible.cfg hosts /home/ec2-user/

#cd .. --->ec2-user

#ll --->shown ansible.cfg and hosts

```
 67  awscli1                available   [ =stable ]
[ec2-user@ip-172-31-25-113 ~]$ cd /etc/ansible/
[ec2-user@ip-172-31-25-113 ansible]$ ll
total 24
-rw-r--r-- 1 root root 19985 Jul  1  2021 ansible.cfg
-rw-r--r-- 1 root root  1016 Jul  1  2021 hosts
drwxr-xr-x 2 root root     6 Jul  1  2021 roles
[ec2-user@ip-172-31-25-113 ansible]$ cp ansible.cfg
cp: missing destination file operand after 'ansible.cfg'
Try 'cp --help' for more information.
[ec2-user@ip-172-31-25-113 ansible]$ cp ansible.cfg hosts /home/ec2-user/
[ec2-user@ip-172-31-25-113 ansible]$ ll
total 24
-rw-r--r-- 1 root root 19985 Jul  1  2021 ansible.cfg
-rw-r--r-- 1 root root  1016 Jul  1  2021 hosts
drwxr-xr-x 2 root root     6 Jul  1  2021 roles
[ec2-user@ip-172-31-25-113 ansible]$ cd ..
[ec2-user@ip-172-31-25-113 etc]$ cd ~
[ec2-user@ip-172-31-25-113 ~]$ ll
total 24
-rw-r--r-- 1 ec2-user ec2-user 19985 Feb 21 18:00 ansible.cfg
-rw-r--r-- 1 ec2-user ec2-user  1016 Feb 21 18:00 hosts
[ec2-user@ip-172-31-25-113 ~]$
```

Step5: Setup Slave With Master

#vi ansible.cfg ---> #host_key_checking = False

                                            Remove # --->save:wq!

#vi hosts --->all line remove using esc+:+%d

        ---->add slave server private ip

```
drwxr-xr-x 2 root root     6 Jul  1  2021 roles
[ec2-user@ip-172-31-25-113 ansible]$ cd ..
[ec2-user@ip-172-31-25-113 etc]$ cd ~
[ec2-user@ip-172-31-25-113 ~]$ ll
total 24
-rw-r--r-- 1 ec2-user ec2-user 19985 Feb 21 18:00 ansible.cfg
-rw-r--r-- 1 ec2-user ec2-user  1016 Feb 21 18:00 hosts
[ec2-user@ip-172-31-25-113 ~]$ vi ansible.cfg
[ec2-user@ip-172-31-25-113 ~]$ vi hosts
[ec2-user@ip-172-31-25-113 ~]$ cat hosts
172.31.24.152
[ec2-user@ip-172-31-25-113 ~]$
```

Ping slave server

ansible all -i hosts -m ping

Step6:workouts vault commands

1.create

While writing the YAML,you can encrypt and start writing.

#ansible-vault create apache.yml

Set passwoed:123

Confirm passwoed:123

Vi --->copy code and save :wq!

#cat apache.yml --->it will show code for encrpt

```
[ec2-user@ip-172-31-25-113 ~]$ ansible-vault create apache.yml
New Vault password:
Confirm New Vault password:
[ec2-user@ip-172-31-25-113 ~]$ cat apache.yml
$ANSIBLE_VAULT;1.1;AES256
63393061373864336430393039373739343835383934363631666139663362663363303636303433
37353338346438636338363731306131623236303234626230a3361333335633265646565635653763
35383730633165656363623533331666137636230383536383766635356231333862396623765366331344
32663135353866636638330a6132313336333533361633236536596532335386263343336263330653466396333
32323435373530376464356436461333337376466333665373636383065383966383230363961356236307
616333936396439353939613567264656333263636362316533863133337623066634623466646136636165
33346163336664666636646331633938333462633396166636663063633323030613733633766613539
6135336435323839646464646663539363165323135323336238333665646566334393862643137623464
34356632323138326363326133364662363462366553630666439366313162323438323862360396461626162
30666663353396136633737666393134303336313463653631383933331373362393373230663030303931665
34353733665653039393037633343630663563393933653931653536164636265626539334303131353762
35626638626623939363761646430366643165393965376664326531303561633833361363133666235
6133316365623436364643834386432336332316166656561334373032363265396433331623438653632
37313836373762336643566633063333313264323536306638376666636366616432366437303262366665
6161653539653333938323336139633635316d
[ec2-user@ip-172-31-25-113 ~]$ █
```

2.Encrypt

Encrypt the unencryped .yml existing files

#vi second.yml   ---->copy yml code

```
ec2-user@ip-172-31-25-113:~
- hosts: all
  remote_user: ec2-user
  become: yes
  tasks:
    - name: Installing Multiple Packages
      yum:
        name: "{{ item }}"
        state: present
      loop:
        - mysql
        - php
        - unzip
:wq!█
```

#ansible-vault encrypt second.yml

Set password --->1234

#cat second.yml

```
[ec2-user@ip-172-31-25-113 ~]$ vi second.yml
[ec2-user@ip-172-31-25-113 ~]$ ansible-vault encrypt second.yml
New Vault password:
Confirm New Vault password:
Encryption successful
[ec2-user@ip-172-31-25-113 ~]$ cat second.yml
$ANSIBLE_VAULT;1.1;AES256
64646431376165373132333646137353833643235643562376132356639663061333438646334323 9
32376533333431363665336133626137616434623438643700a653533613638366263335313439353 9
34343164653932323534373035356235376266386439643135363230326130376364626634333346 5
36363531356363623310a366131386336662623335663732363333235306534336230393233643138 66
38323932373432343363323335613132363937643863631306631613639333737666235643562303 6
64383336353962636439343563666334636539333532396661663632653937653434356262636346 2
36306635663436563265643837376264386531646637613638616139346133334333032623938376 4
65343365353539613566313930383263333626230316239613365646235326138623365356434316 63465
61626635353732363733365326530396435316530616334303632663636356433313234613361666 162
32323335356334376135616539356662653336434616335622303031363862636636346632336535 3162
62346536636262333334613035376536323666383834663834646364362333362653139626361656 234
38333323861363365363061336166376531306536362323664346637316139661623964666333661 3039
35313664633734393030333636356131653962386231333831613933336343761643735331633533 37
65333366303162313031626539393736666643738363161323430626664316666333839356139363 2
63633230356163335356564333731653630035
[ec2-user@ip-172-31-25-113 ~]$
```

3.Decrypt

To decrypt the encrypted file

#ansible-vault decrypt second.yml

Ask password give crct --->1234

#cat second.yml

```
[ec2-user@ip-172-31-25-113 ~]$ ansible-vault decrypt second.yml
Vault password:
Decryption successful
[ec2-user@ip-172-31-25-113 ~]$ cat second.yml
- hosts: all
  remote_user: ec2-user
  become: yes
  tasks:
    - name: Installing Multiple Packages
      yum:
        name: "{{ item }}"
        state: present
      loop:
        - mysql
        - php
        - unzip
[ec2-user@ip-172-31-25-113 ~]$
```

 encrypt file show as decrypt

4.View

To view the encrypted yaml file without decrypt

#ansible-vault view second.yml

Password give --->1234

356633356538646138336265306364373939313432393861326365346430383033336163653231

65303633353630363062386463361133626333

```
[ec2-user@ip-172-31-25-113 ~]$ ansible-vault view second.yml
Vault password:
- hosts: all
  remote_user: ec2-user
  become: yes
  tasks:
    - name: Installing Multiple Packages
      yum:
        name: "{{ item }}"
        state: present
      loop:
        - mysql
        - php
        - unzip
[ec2-user@ip-172-31-25-113 ~]$
```

#cat second.yml --->shown encrypt

```
   - unzip
[ec2-user@ip-172-31-25-113 ~]$ cat second.yml
$ANSIBLE_VAULT;1.1;AES256
34356331613963323966353363613137326663616235613566363664306236646134356534393934
30633737613538613737313316430393862316338363635630a306139363731346233363337313936339
39633662383264346563306139383937363639363634333762353939383436333135363230303631
35636363634346360a376531353338386137636630613931386616538313930356332303161636364
3137336331643732313264396234373263353373865316330653463356263623838663564462613462
31336666383862626631373734626664343233396661626565356663306161336334343264313464
30656461616432343266656561356432363346332343136336562303732623037303430356131663563
30653264303265623261333333537326134626661623238346563639321353437303064663633030
36646431323539373734633434363438333330306535354393263323461313131346632306563333323564
3031653334346663303838346303052234616665613736333462343534353331397343564623636
66663333663130303333462363663326165363832343361373064333293430363533333566386361
3331656566646161641403333232373831343932303336232656236646536636164666235353131393938
3765386530376663316635356530373666373835386132326334626232031313063636265623293238
3566333365386461383362653630636437393931343239386132636534643038303333361636533835
65303633353630363062386463361133626333
```

5.Edit

To edit the encrypted yaml file

#ansible-vault edit second.yml

Password give --->1234

Edit code ex:name package1 add --->save :wq!

5.Rekey

To change the vault password
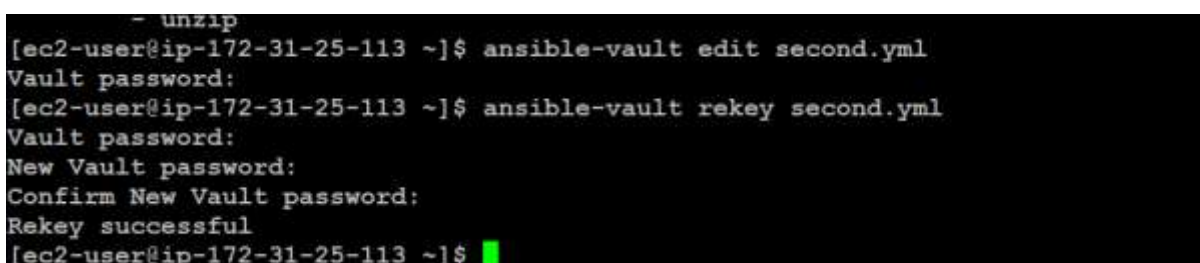
#ansible-vault rekey second.yml

Vault password:1234

New Vault password:1234

Confirm New Vault password:1234

Rekey successful

Run Vault yaml file

#ansible-playbook -i hosts apache.yml --ask-vault-pass

Vault Password ask --->give correct one