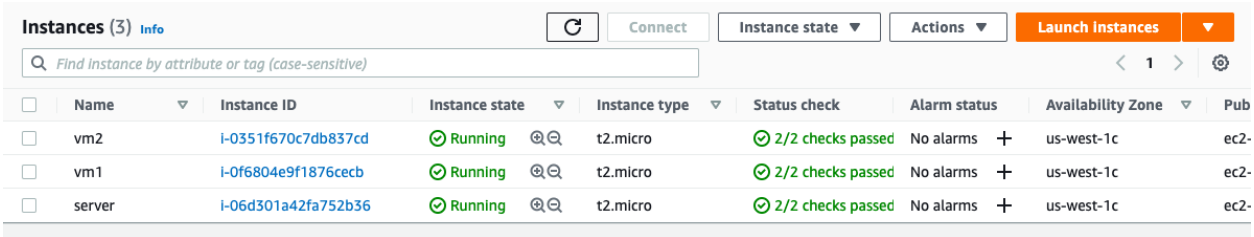
Assignment1-Ansible

Deploying three (3) Virtual Machines

Deployed three VM's with OS as ubuntu using Amazon EC2 instances in Aws portal and naming one the server and the other 2 machines as vm1 and vm2 and generating keypair in order to access the other vm's from the server



Instances (3) Info

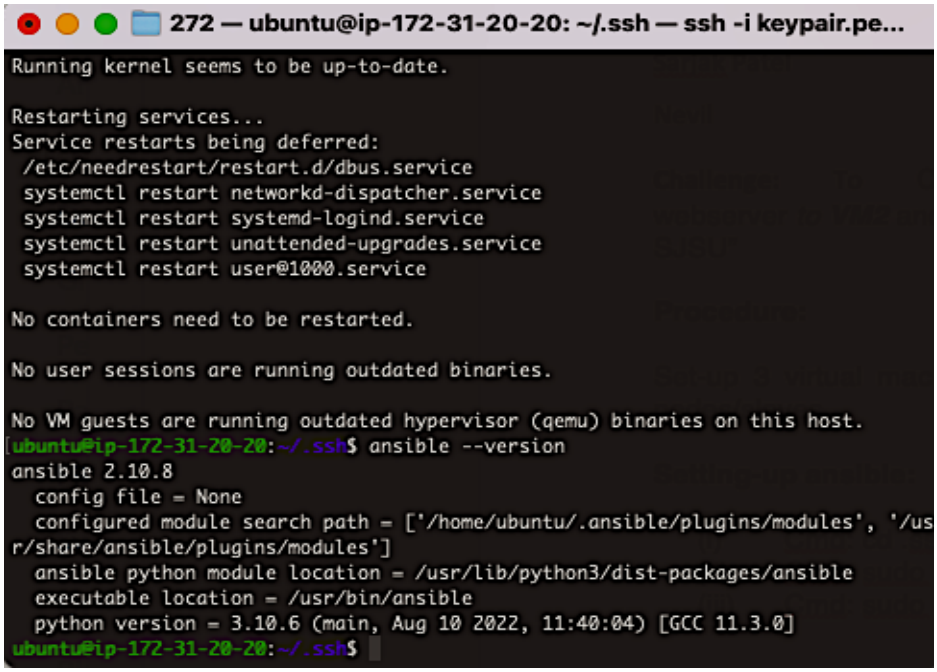
Connect | Instance state | Actions | Launch instances

Find instance by attribute or tag (case-sensitive)

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Pub
vm2	i-0351f670c7db837cd	Running	t2.micro	2/2 checks passed	No alarms	us-west-1c	ec2-
vm1	i-0f6804e9f1876cecb	Running	t2.micro	2/2 checks passed	No alarms	us-west-1c	ec2-
server	i-06d301a42fa752b36	Running	t2.micro	2/2 checks passed	No alarms	us-west-1c	ec2-

Installing Ansible on the server

(i) cd .ssh
(ii) sudo apt-get update && apt-get upgrade
(iii) sudo apt install ansible
(iv) ansible –version



```
272 — ubuntu@ip-172-31-20-20: ~/.ssh — ssh -i keypair.pe...
Running kernel seems to be up-to-date.

Restarting services...
Service restarts being deferred:
 /etc/needrestart/restart.d/dbus.service
 systemctl restart networkd-dispatcher.service
 systemctl restart systemd-logind.service
 systemctl restart unattended-upgrades.service
 systemctl restart user@1000.service

No containers need to be restarted.

No user sessions are running outdated binaries.

No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-20-20:~/.ssh$ ansible --version
ansible 2.10.8
  config file = None
  configured module search path = ['/home/ubuntu/.ansible/plugins/modules', '/us
r/share/ansible/plugins/modules']
  ansible python module location = /usr/lib/python3/dist-packages/ansible
  executable location = /usr/bin/ansible
  python version = 3.10.6 (main, Aug 10 2022, 11:40:04) [GCC 11.3.0]
ubuntu@ip-172-31-20-20:~/.ssh$
```

Uploading the keypair.pem file into the server for further connections with the remaining VM's

scp -i desktop/sanjay/272/keypair.pem -r desktop/sanjay/272/keypair.pem ubuntu@ ec2-50-18-5-43.us-west-1.compute.amazonaws.com:/home/ubuntu/.ssh/keypair.pem

Generating a hosts file

It contains the details of the two VM's into which we need to install apache and send the message

Hosts file

```
[apache]
vm2 ansible_host=13.57.242.177 ansible_ssh_private_key_file=keypair.pem
vm3 ansible_host=3.101.63.112 ansible_ssh_private_key_file=keypair.pem

[all:vars]
ansible_python_interpreter=/usr/bin/python3
```

Generating an index file to display message

Index.html

```
<head>
        <h1>
                Hello World from SJSU- {{inventory_hostname_short}}!
        </h1>
</head>
```

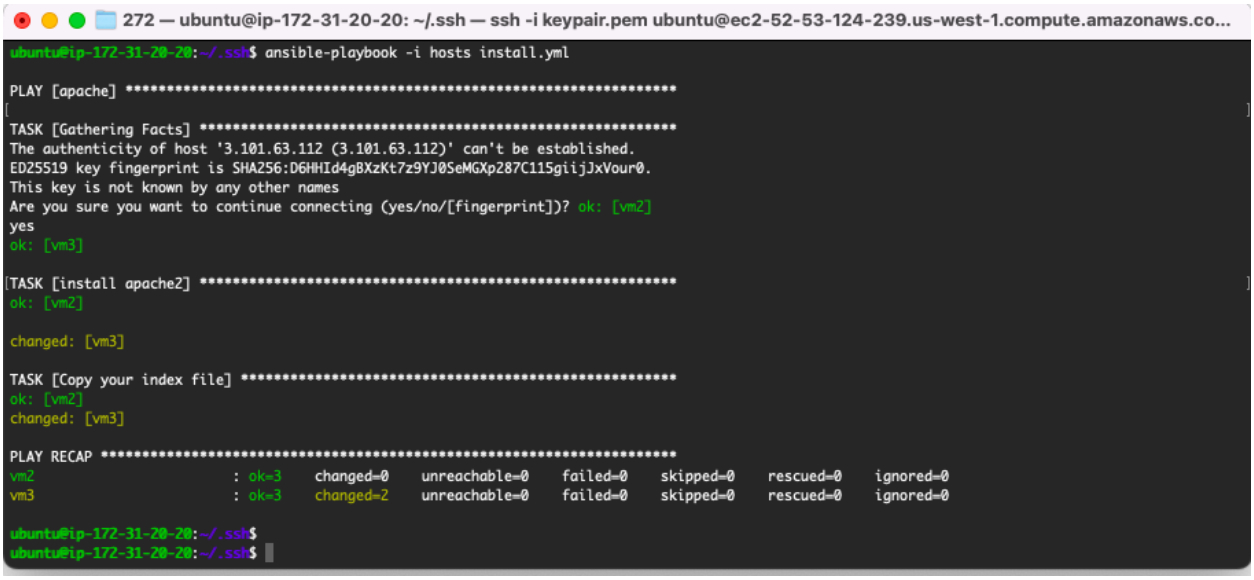
Creating a playbook for deploying the Apache server on the VM's

Install.yml

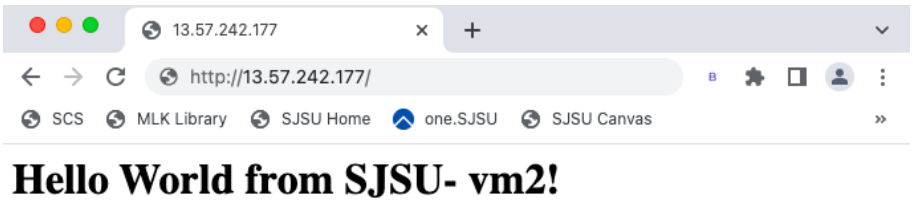
```
- hosts: apache
  become: true
  tasks:
  - name: install apache2
    apt: name=apache2 update_cache=yes state=latest
  - name: Copy your index file
    template:
     src: "index.html"
     dest: "/var/www/html/index.html"
```

Running the playbook

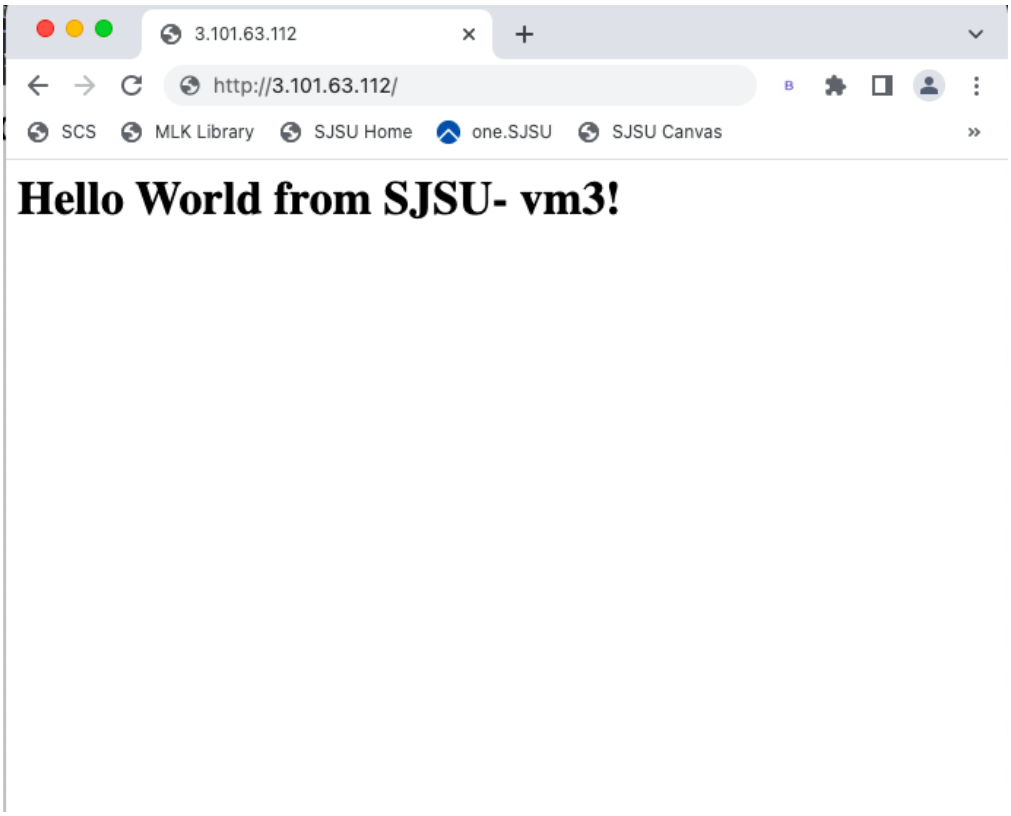
ansible-playbook -i hosts install.yml



Output from VM2



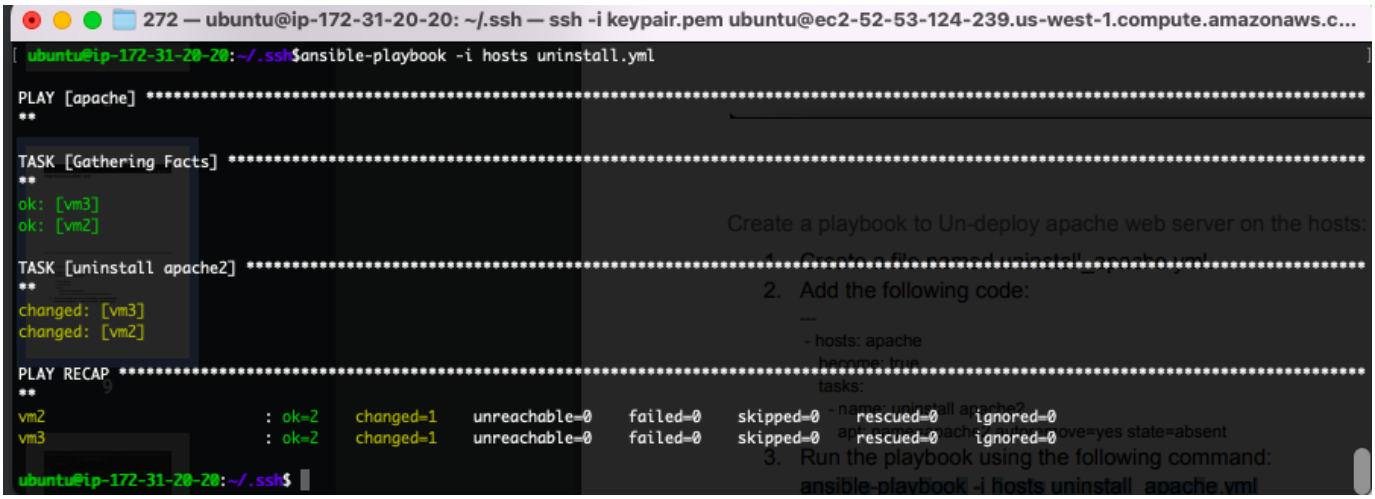
Output from VM3



Creating a playbook for Un deploying the Apache server on VM's

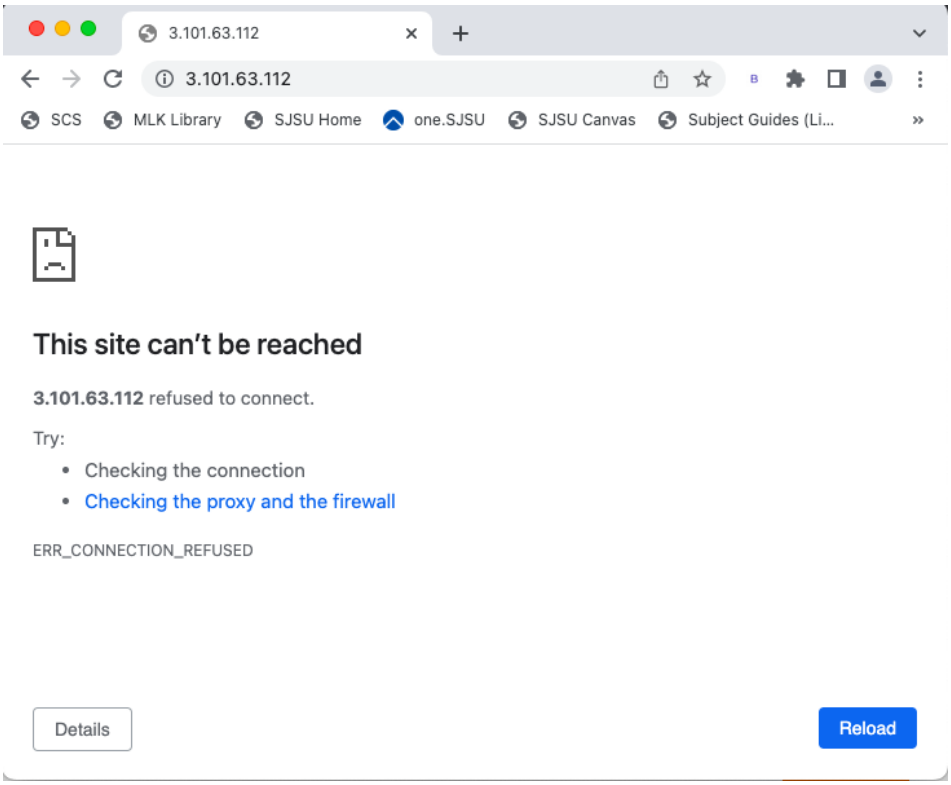
Uninstall.yml

```
- hosts: apache
  become: true
  tasks:
  - name: uninstall apache2
    apt: name=apache2 autoremove=yes state=absent
```

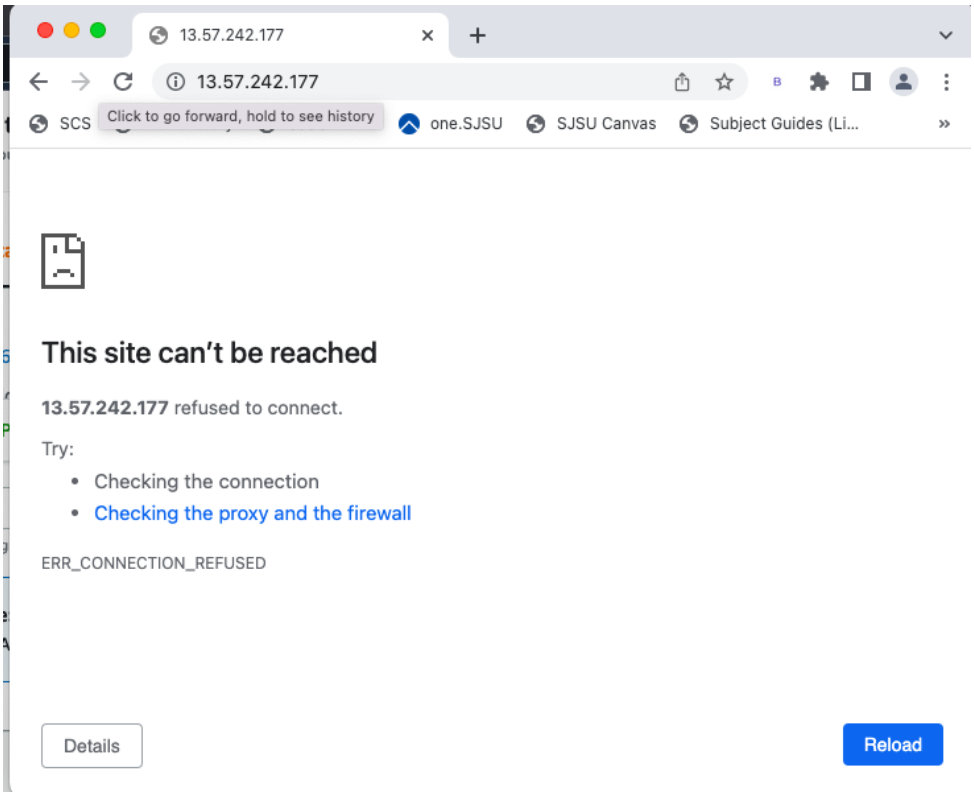


VM's after Un deploying Apache server

VM2



VM3


13.57.242.177
13.57.242.177
SCS
Click to go forward, hold to see history
one.SJSU
SJSU Canvas
Subject Guides (Li...
This site can't be reached
13.57.242.177 refused to connect.
Try:
Checking the connection
Checking the proxy and the firewall
ERR_CONNECTION_REFUSED
Details
Reload