EX.NO:1,(b) 1. Virtualization

DATE:

b. Virtualize a machine and check how many virtual machine can be utilized at a particular time.

AIM:

To execute the procedure for how many virtual machine can be utilized at a particular time**.**

CREATION OF VIRTUAL MACHINES

- **PROCEDURE:**
- **Open Frontend, kvm1, kvm2 (Pwd: Redhat)**
- **Goto FrontEnd ->Right Click-> Open In Terminal**
- [frontend@frontend Desktop]$ **su**
- Password: **redhat**
- [root@frontend Desktop]# **su – oneadmin**

CREATION OF VIRTUAL MACHINES

OUTPUT:

Last login: Wed Aug 21 09:27:42 IST 2019 on pts/0

[oneadmin@frontend ~]$ **onehost list**

OUTPUT:

```
 ID NAME          CLUSTER  RVM     ALLOCATED_CPU     ALLOCATED_MEM STAT
  0 kvm1.saec.com  -        0     0 / 100 (0%)     0K / 986.7M (0%) on
  1 kvm2.saec.com  -        0     0 / 100 (0%)     0K / 986.7M (0%) on
```

++

Goto Run -> type cmd -> ipcongif

Check the IP ADDRESS of your system.

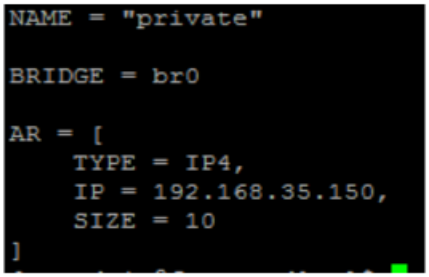
Goto FrontEnd,

[oneadmin@frontend ~]$ **vi /var/tmp/mynetwork.one**

CREATION OF VIRTUAL MACHINES

Press i for Inserting Mode in the Editor
Copy the Following Code:

```
NAME = "private"
BRIDGE = br0
AR = [
TYPE = IP4,
IP = 192.168.35.150,
SIZE = 10
]
```



Press **ESC**, and then **Shift+ : + w + q** (altogether)
[oneadmin@frontend ~]$ **onevnet create /var/tmp/mynetwork.one**
ID: 1
[oneadmin@frontend ~]$ **onevnet list**
OUTPUT:

ID	USER	GROUP	NAME		CLUSTER	BRIDGE	LEASES
1	oneadmin	oneadmin	private	-		br0	0

CREATION OF VIRTUAL MACHINES

In Frontend, goto Apllication -> Mozilla Firefox

url: http://frontend:9869

Go to Virtual Resources -> Images -> Click Add + Symbol

Name : **TTYLinux_1.0**

Type: **Select "DATABLOCK "**

Image Location : **Select "Empty Datablock"**

Size: **512**

FS: **qcow2**

CLICK "CREATE"

CREATION OF VIRTUAL MACHINES

In Frontend, goto Apllication -> Mozilla Firefox

url: http://frontend:9869

Go to Virtual Resources -> Images -> Click Add + Symbol

Name : **TTYLinux_1.0**

Type: **Select "DATABLOCK "**

Image Location : **Select "Empty Datablock"**

Size: **512Goto Terminal,**

[oneadmin@frontend ~]$ **onetemplate list**

OUTPUT:

ID USER	GROUP	NAME	REGTIME
2 oneadmin	oneadmin	TTYLinux_1.o	08/21 12:38:42

Goto Virtual Resources -> Templates -> click the file

CREATION OF VIRTUAL MACHINES

Goto Terminal,

[oneadmin@frontend ~]$ **oneimage list**

ID USER	GROUP	NAME	DATASTORE	SIZE TYPE PER STAT RVMS
2 oneadmin	oneadmin	TTYLinux_1.0	default	512M DB No rdy 0

Go to Virtual Resources -> Templates -> Click Add + Symbol

Name : **TTYLinux_1.0**

VCPU: **1**

CLICK "CREATE"

CREATION OF VIRTUAL MACHINES

Goto Terminal,

[oneadmin@frontend ~]$ **onetemplate list**

OUTPUT:

ID	USER	GROUP	NAME	REGTIME
2	oneadmin	oneadmin	TTYLinux_1.o	08/21 12:38:42

Goto Virtual Resources -> Templates -> click the file

Now click Instantiate ->

VM NAME : kvm1

Click -> Instantiate

Now click Instantiate ->

VM NAME : kvm2

Click -> Instantiate

Goto Terminal,

[oneadmin@frontend ~]$ **onevm list**

OUTPUT:

ID	USER	GROUP	NAME	STATU	CPU	UMEM	HOST	TIME
3	oneadmin	oneadmin	kvm1	runn	2	512M	kvm2.saec.com	0d 00h01
2	oneadmin	oneadmin	kvm2	runn	2	512M	kvm1.saec.com	0d 00h02

Goto Browser , Virtual Resources-> Virtual Machine ->

Click -> oneadmin -> Migrate [live]

Select host -> click "Migrate"

```
[oneadmin@frontend1 ~]$ onevm migrate --live TTYLinux_1-2 kvm1.cnl.com
[oneadmin@frontend1 ~]$ onevm list
   ID USER     GROUP    NAME            STAT UCPU    UMEM HOST             TIME
    2 oneadmin oneadmin TTYLinux_1-2    runn   24    256M kvm1.cnl.c   0d 00h13
[oneadmin@frontend1 ~]$ onevm list
   ID USER     GROUP    NAME            STAT UCPU    UMEM HOST             TIME
    2 oneadmin oneadmin TTYLinux_1-2    runn   24    256M kvm1.cnl.c   0d 00h13
[oneadmin@frontend1 ~]$
```

RESULT:

In this above application is how many virtual machine can be utilized at a particular time executed

Successfully