

3. Private Cloud

c. Show the virtual machine migration based on certain conditions from one node to the other.

AIM:

To execute the procedure for transfer the file from one virtual machine to another virtual machine.

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 -> ipconfig

Check the IP ADDRESS of your system.

Goto FrontEnd,

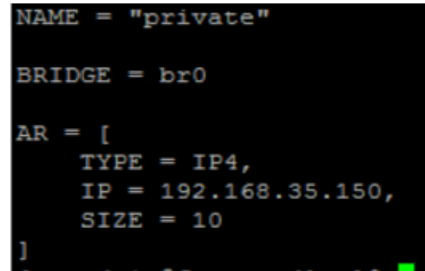
[oneadmin@frontend ~]\$ vi /var/tmp/mynetwork.one

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
]
```



```
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 Application -> 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 Application -> 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_1.0	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_1.0	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	STATUS	CPU	MEM	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 ~]$
```

```

The sum of equals 246

4.3 Show the virtual machine migration based on the certain condition from one node to the other.

****Migrate the instance from one hypervisor to another****

****-live will ensure the VM is running****

****Check current hypervisor****

$ onevm list

[oneadmin@frontendl ~]$ onevm list


| ID | USER     | GROUP    | NAME         | STAT | UCPU | UMEM | HOST       | TIME     |
|----|----------|----------|--------------|------|------|------|------------|----------|
| 2  | oneadmin | oneadmin | TTYLinux_1-2 | runn | 24   | 256M | kvm2.cnl.c | 0d 00h11 |



****Migrate the instance****

$ onevm migrate --live TTYLinux_1-0 kvm1.cnl.com

Check current hypervisor;

$ onevm list

[oneadmin@frontendl ~]$ onevm migrate --live TTYLinux_1-2 kvm1.cnl.com
[oneadmin@frontendl ~]$ onevm list


| ID | USER     | GROUP    | NAME         | STAT | UCPU | UMEM | HOST       | TIME     |
|----|----------|----------|--------------|------|------|------|------------|----------|
| 0  | oneadmin | oneadmin | TTYLinux_1-2 | runn | 24   | 256M | kvm1.cnl.c | 0d 00h13 |


[oneadmin@frontendl ~]$ 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@frontendl ~]$

Check instance uptime:

$ ssh root@192.168.35.150 "uptime"

Warning: Permanently added '192.168.35.150' (RSA) to the list of known hosts.

132, Pillaiyarkoil Street, Secretariat Colony, Paduvanchery, Selaiyur, Chennai - 600073.
+91-44-22292796 | +91-9884561188 | www.cloudncloud.com | training@cloudncloud.com

```

RESULT:

The above program migration using transferring the files from one virtual machine to another machine was executed successfully