

## Objective

Moving virtual machines on VMware platform that are hosted on local machines

## Equipment, Tools, Hardware, and Software Needed

1. Desktop PC, Laptop with internet connection.
2. VMware Workstation software - free downloadable
3. Ubuntu (live image) - free downloadable. You may download other Operating Systems image.

## Theorem

What do you do if you have created a virtual machine and you want to move it to a different computer? Or even somewhere else on the same computer? The process is not difficult, and in most cases you can even move your virtual machine from a Windows host to a Linux host — or vice versa.

One of the core features of virtualization in Cloud Computing is the easiness of copying and moving and virtual machines among hosts (physical machines)

In this Lab, we will prepare and move Virtual Machine and practice the MAC addressing challenges associated with the move/copy of virtual machines.

## Procedure

**\*\*\* Note: Use your previous Lab VM**

1. Make sure your previously created virtual machines (VMs) are powered off.
2. Go to the folder of one of the Virtual Machine, for example VM 1.
3. Copy the **Folder** of that virtual machine **and Include the copy of this file in your Lab Report**
4. Paste the copied **Folder** (*with different Folder name*) on the same root path of the virtual machines directory.
5. In the new VM folder, edit the configuration file (.vmx) as explained in the previous lab procedure. a.  
    uuid.action = "create"  
    b. uuid.bios = "56 4d 3f 19 57 a8 46 af-c5 4d 6f 82 dd 7a 04 1c"  
    c. uuid.location = "56 4d 3f 19 57 a8 46 af-c5 4d 6f 82 dd 7a 04 1a"

vm1

```
user.vmx - Notepad
File Edit Format View Help
floppy0.fileName = ""
ethernet0.present = "TRUE"
serial0.present = "TRUE"
extendedConfigFile = "user.vmx"
floppy0.clientDevice = "FALSE"
uuid.bios = "56 4d 3f 19 57 a8 46 af-c5 4d 6f 82 dd 7a 04 1c"
uuid.location = "56 4d 3f 19 57 a8 46 af-c5 4d 6f 82 dd 7a 04 1a"
scsi0:0.redo = ""
pciBridge0.pciSlotNumber = "17"
pciBridge4.pciSlotNumber = "21"
pciBridge5.pciSlotNumber = "22"
pciBridge6.pciSlotNumber = "23"
pciBridge7.pciSlotNumber = "24"
scsi0.pciSlotNumber = "16"
usb.pciSlotNumber = "32"
ethernet0.pciSlotNumber = "33"
sound.pciSlotNumber = "34"
ehci.pciSlotNumber = "35"
sata0.pciSlotNumber = "36"
svga.vramSize = "268435456"
vmotion.checkpointFBSize = "4194304"
vmotion.checkpointSVGAPrimarySize = "268435456"
vmotion.svga.maxSize = "1073741824"
```

vm1 copied

```
user.vmx - Notepad
File Edit Format View Help
ethernet0.connectionType = "nat"
ethernet0.addressType = "generated"
ethernet0.virtualDev = "e1000"
serial0.fileType = "thinprint"
serial0.fileName = "thinprint"
floppy0.fileType = "device"
floppy0.fileName = ""
ethernet0.present = "TRUE"
serial0.present = "TRUE"
extendedConfigFile = "user.vmx"
floppy0.clientDevice = "FALSE"
uuid.bios = "56 4d 3f 19 57 a8 46 af-c5 4d 6f 82 dd 7a 04 1c"
uuid.location = "56 4d 3f 19 57 a8 46 af-c5 4d 6f 82 dd 7a 04 1a"
scsi0:0.redo = ""
pciBridge0.pciSlotNumber = "17"
pciBridge4.pciSlotNumber = "21"
pciBridge5.pciSlotNumber = "22"
pciBridge6.pciSlotNumber = "23"
pciBridge7.pciSlotNumber = "24"
scsi0.pciSlotNumber = "16"
usb.pciSlotNumber = "32"
ethernet0.pciSlotNumber = "33"
sound.pciSlotNumber = "34"
```

## Vm2

```
user.vmx - Notepad
File Edit Format View Help
serial0.fileName = "thinprint"
serial0.fileName = "thinprint"
floppy0.fileName = "device"
floppy0.fileName = ""
ethernet0.present = "TRUE"
serial0.present = "TRUE"
extendedConfigFile = "user.vmx"
floppy0.clientDevice = "FALSE"
uuid.bios = "56 4d 3f 19 57 a8 46 af-c5 4d 6f 82 dd 7a 04 1c"
uuid.location = "56 4d 3f 19 57 a8 46 af-c5 4d 6f 82 dd 7a 04 1a"
scsi0:0.redo = ""
pciBridge0.pciSlotNumber = "17"
pciBridge4.pciSlotNumber = "21"
pciBridge5.pciSlotNumber = "22"
pciBridge6.pciSlotNumber = "23"
pciBridge7.pciSlotNumber = "24"
scsi0.pciSlotNumber = "16"
usb.pciSlotNumber = "32"
ethernet0.pciSlotNumber = "33"
sound.pciSlotNumber = "34"
ehci.pciSlotNumber = "35"
sata0.pciSlotNumber = "36"
svga.vramSize = "268435456"
```

## Vm2 copy

```
Ubuntu 64-bit.vmx - Notepad
File Edit Format View Help
scsi0:1.fileName = "auto detect"
scsi0:1.present = "TRUE"
uuid.bios = "56 4d e2 55 fe bf 7c 7f-f6 f3 77 b3 6f e4 e7 1e"
uuid.location = "56 4d e2 55 fe bf 7c 7f-f6 f3 77 b3 6f e4 e7 1e"
scsi0:0.redo = ""
pciBridge0.pciSlotNumber = "17"
pciBridge4.pciSlotNumber = "21"
pciBridge5.pciSlotNumber = "22"
pciBridge6.pciSlotNumber = "23"
pciBridge7.pciSlotNumber = "24"
scsi0.pciSlotNumber = "16"
usb.pciSlotNumber = "32"
ethernet0.pciSlotNumber = "33"
sound.pciSlotNumber = "34"
ehci.pciSlotNumber = "35"
sata0.pciSlotNumber = "36"
svga.vramSize = "268435456"
vmotion.checkpointFBSIZE = "4194304"
vmotion.checkpointSVGAPrimarySize = "268435456"
vmotion.svga.mobMaxSize = "1073741824"
vmotion.svga.graphicsMemoryKB = "8388608"
vmotion.svga.supports3D = "1"
vmotion.svga.baseCapLevel = "0"
```

6. Close the Configuration file (.vmx)
  7. Open VMware Workstation, and click on *Open* and brows the new copied folder, select the configuration file (.vmx).
  8. Start the virtual machine. **Lab Task**
1. Report all outputs of all commands on the procedure above in addition to the below configuration settings.

**Open the Configuration file (.vmx) for both virtual machines and include your answer in the Lab Report.**

Configuration (.vmx)	Original Virtual Machine (VM 1)	Copied Virtual Machine (VM 3)
uuid.bios=	"56 4d 3f 19 57 a8 46 af-c5 4d 6f 82 dd 7a 04 1c"	"56 4d 3f 19 57 a8 46 af-c5 4d 6f 82 dd 7a 04 1c"
ethernet0. Address =	"00:0c:29:7a:04:1c"	"00:0c:29:7a:04:1c"

2. Following the mentioned procedure, create another Virtual Machine

Configuration (.vmx)	Original Virtual Machine (VM 2)	Copied Virtual Machine (VM 4)
uuid.bios=	"56 4d 99 44 f6 ae d4 d9-37 86 2e b8 d6 7f 61 b7"	"56 4d e2 55 fe bf 7c 7f-f6 f3 77 b3 6f e4 e7 1e"
ethernet0. Address =	"00:0c:29:7f:61:b7"	"00:0c:29:e4:e7:1e"