# Práctica guiada de MV en modo comando

## A) Comandos de información Vboxmanage

Recordatorio: en Windows hay que situarse en C:\Program Files\Oracle\Virtualbox y ejecutar cmd como administrador

1 Para saber la versión de Virtualbox

```
C:\Program Files\Oracle\VirtualBox>vboxmanage -v
6.0.10r132072
```

2 Redireccionar una salida con los sistemas operativos existentes en Virtualbox

```
C:\Program Files\Oracle\VirtualBox>vboxmanage list ostypes>listado_opción_ssoo.txt
```

Listado en bloc de notas

```
ID:          Other
Description: Other/Unknown
Family ID:   Other
Family Desc: Other
64 bit:      false

ID:          Other_64
Description: Other/Unknown (64-bit)
Family ID:   Other
Family Desc: Other
64 bit:      true

ID:          Windows31
Description: Windows 3.1
Family ID:   Windows
Family Desc: Microsoft Windows
64 bit:      false

ID:          Windows95
Description: Windows 95
Family ID:   Windows
Family Desc: Microsoft Windows
64 bit:      false

ID:          Windows98
Description: Windows 98
Family ID:   Windows
Family Desc: Microsoft Windows
64 bit:      false

ID:          WindowsMe
Description: Windows ME
Family ID:   Windows
Family Desc: Microsoft Windows
64 bit:      false

ID:          WindowsNT3x
Description: Windows NT 3.x
Family ID:   Windows
Family Desc: Microsoft Windows
64 bit:      false
```

3 Listar máquinas virtuales

```
C:\Program Files\Oracle\VirtualBox>vboxmanage list vms
"Windows 10 MV" {ac7f82f2-4a8b-402f-a1e4-99632e32f92e}
"Windows 10 MV_1" {69980288-a3b7-4084-a0f2-86fd0bbc4af5}
"maqAO32bits" {20b6b9e4-295c-4501-b227-d88cf5197b45}
"maqiesquevedo" {bfa0f4bd-d63f-45a0-a9ed-f182c4a651e4}
"windows7office2013" {6cae33b1-e6a9-4d9b-8646-2b87aa03ccad}
"windows10marzo2018" {18731922-120f-465e-a01d-8483afc6cff2}
"ubuntu18.04" {594aab1f-d46e-4461-b806-5d93a650b411}
"windows2016server" {94cfce70-cc50-4b9f-ba32-b4935844540a}
```

4 Listado formato largo redireccionado al bloc de notas

```
C:\Program Files\Oracle\VirtualBox>vboxmanage list vms -l>listado_maquinas_virtuales.txt
```

```
Name:                        Windows 10 MV
Groups:                      /
Guest OS:                    Windows 10 (64-bit)
UUID:                        ac7f82f2-4a8b-402f-a1e4-99632e32f92e
Config file:                 D:\MVvirtualbox\Windows 10 MV\Windows 10 MV.vbox
Snapshot folder:             D:\MVvirtualbox\Windows 10 MV\Snapshots
Log folder:                  D:\MVvirtualbox\Windows 10 MV\Logs
Hardware UUID:               ac7f82f2-4a8b-402f-a1e4-99632e32f92e
Memory size                  1572MB
Page Fusion:                 disabled
VRAM size:                   128MB
CPU exec cap:                100%
HPET:                        disabled
CPUProfile:                  host
Chipset:                     piix3
Firmware:                    BIOS
Number of CPUs:              1
PAE:                         disabled
Long Mode:                   enabled
Triple Fault Reset:          disabled
APIC:                        enabled
X2APIC:                      disabled
Nested VT-x/AMD-V:           disabled
CPUID Portability Level:     0
CPUID overrides:             None
Boot menu mode:              message and menu
Boot Device 1:               HardDisk
Boot Device 2:               DVD
Boot Device 3:               Not Assigned
Boot Device 4:               Not Assigned
ACPI:                        enabled
IOAPIC:                      enabled
BIOS APIC mode:              APIC
Time offset:                 0ms
RTC:                         local time
Hardw. virt.ext:             enabled
Nested Paging:               enabled
Large Pages:                 disabled
VT-x VPID:                   enabled
VT-x unr. exec.:             enabled
Paravirt. Provider:          Default
Effective Paravirt. Prov.:   HyperV
State:                       powered off (since 2018-02-25T16:50:24.000000000)
```

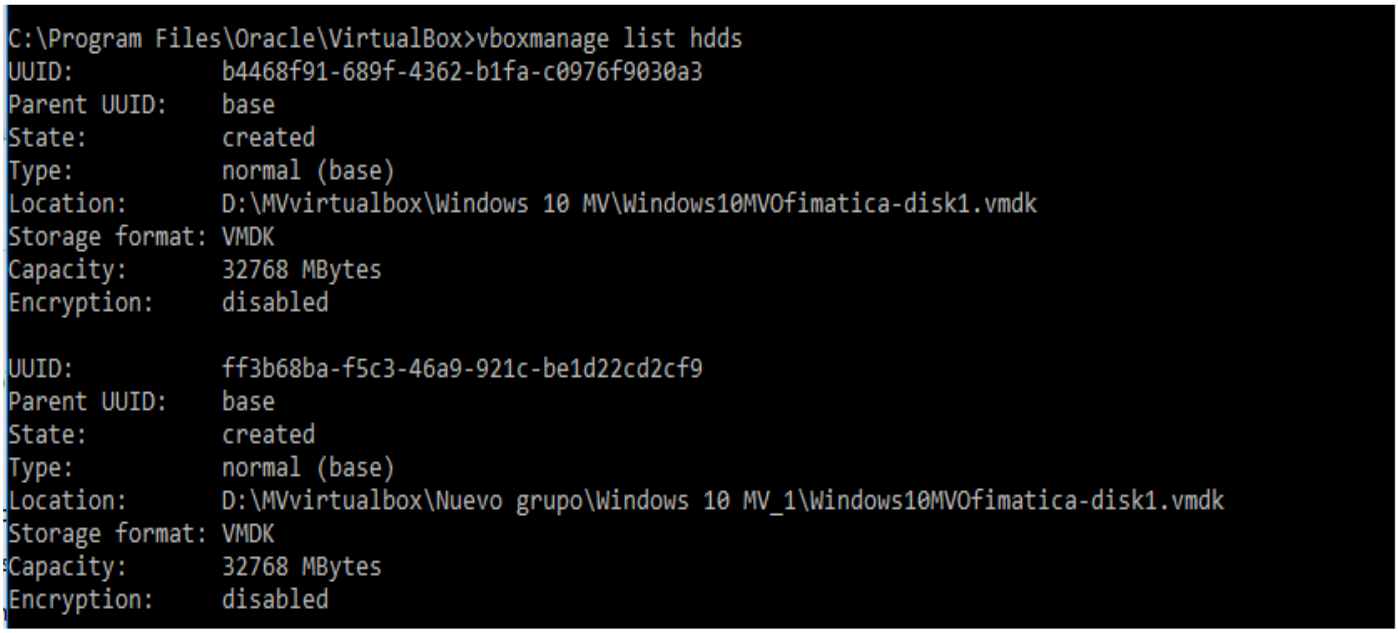
Redireccionamiento de la información de una máquina virtual “windows2016server”

```
C:\Program Files\Oracle\VirtualBox>vboxmanage showvminfo "windows2016server">ejemploinfomaqwindows2016server.txt
```

Bloc de notas

```
Name:                        windows2016server
Groups:                      /Nuevo grupo
Guest OS:                    Windows 2016 (64-bit)
UUID:                        94cfce70-cc50-4b9f-ba32-b4935844540a
Config file:                 D:\MVvirtualbox\Nuevo grupo\windows2016server\windows2016server.vbox
Snapshot folder:             D:\MVvirtualbox\Nuevo grupo\windows2016server\Snapshots
Log folder:                  D:\MVvirtualbox\Nuevo grupo\windows2016server\Logs
Hardware UUID:               94cfce70-cc50-4b9f-ba32-b4935844540a
Memory size                  4096MB
Page Fusion:                 disabled
VRAM size:                   128MB
CPU exec cap:                100%
HPET:                        disabled
CPUProfile:                  host
Chipset:                     piix3
Firmware:                    BIOS
Number of CPUs:              1
PAE:                         disabled
Long Mode:                   enabled
Triple Fault Reset:          disabled
APIC:                        enabled
X2APIC:                      disabled
Nested VT-x/AMD-V:           disabled
CPUID Portability Level:     0
CPUID overrides:             None
Boot menu mode:              message and menu
Boot Device 1:               Floppy
Boot Device 2:               DVD
Boot Device 3:               HardDisk
Boot Device 4:               Not Assigned
ACPI:                        enabled
IOAPIC:                      enabled
BIOS APIC mode:              APIC
Time offset:                 0ms
RTC:                         local time
Hardw. virt.ext:             enabled
Nested Paging:               enabled
Large Pages:                 enabled
VT-x VPID:                   enabled
VT-x unr. exec.:             enabled
```

Listar un elemento en concreto: por ejemplo los discos duros



```
C:\Program Files\Oracle\VirtualBox>vboxmanage list hdds
UUID:           b4468f91-689f-4362-b1fa-c0976f9030a3
Parent UUID:    base
State:          created
Type:           normal (base)
Location:       D:\MVvirtualbox\Windows 10 MV\Windows10MVOfimatica-disk1.vmdk
Storage format: VMDK
Capacity:       32768 MBytes
Encryption:     disabled

UUID:           ff3b68ba-f5c3-46a9-921c-be1d22cd2cf9
Parent UUID:    base
State:          created
Type:           normal (base)
Location:       D:\MVvirtualbox\Nuevo grupo\Windows 10 MV_1\Windows10MVOfimatica-disk1.vmdk
Storage format: VMDK
Capacity:       32768 MBytes
Encryption:     disabled
```

## B) Comandos creación de una máquina virtual con Vboxmanage

Creamos la máquina virtual llamada Matrix

```
C:\Program Files\Oracle\VirtualBox>vboxmanage createvm --name Matrix
Virtual machine 'Matrix' is created.
UUID: f5a183f6-4ed7-48b9-8d8e-6f23f9f30ed9
Settings file: 'D:\MVvirtualbox\Matrix\Matrix.vbox'
```

Creamos el disco duro de capacidad 20 GBs  y un vdi en el path dónde se crean las máquinas

```
C:\Program Files\Oracle\VirtualBox>vboxmanage createhd --filename "D:\MVvirtualbox\Matrix\Matrix.vdi" --size 20480
0%...10%...20%...30%...40%...50%...60%...70%...80%...90%...100%
Medium created. UUID: 0133e3e4-34c3-4017-bf3b-b355e2f1fd8a
```

Registramos la máquina virtual en el sistema de VirtualBox

```
C:\Program Files\Oracle\VirtualBox>vboxmanage registervm "D:\MVvirtualbox\Matrix\Matrix.vbox"
```

Les damos características:

Sistema Operativo: Ubuntu

Memoria de 1GB

```
C:\Program Files\Oracle\VirtualBox>vboxmanage modifyvm Matrix --ostype Ubuntu

C:\Program Files\Oracle\VirtualBox>vboxmanage modifyvm Matrix --memory 1024

C:\Program Files\Oracle\VirtualBox>
```

Comprobamos en el panel de virtualbox que la maquina está registrada


Creamos un controlador SATA con característica IntelAhci y autoarrancable en la máquina virtual

```
C:\Program Files\Oracle\VirtualBox>vboxmanage storagectl Matrix --name SATA --add sata --controller IntelAhci --bootable on

C:\Program Files\Oracle\VirtualBox>
```

Asociamos el controlador a un vdi ya creado en otra máquina virtual llamada Ubuntu18 y en el path que muestra la captura de pantalla.

```
C:\Program Files\Oracle\VirtualBox>vboxmanage storageattach Matrix --storagectl SATA --port 0 --device 0 --type hdd --me
dium "D:\MVvirtualbox\Nuevo grupo\ubuntu18\ubuntu18.vdi"

C:\Program Files\Oracle\VirtualBox>
```

Añadimos características de tarjeta gráfica activado aceleradora 3d y memoria gráfica de 128 bits

```
C:\Program Files\Oracle\VirtualBox>vboxmanage modifyvm Matrix --vram 128 --accelerate3d on

C:\Program Files\Oracle\VirtualBox>
```

Señalamos características de tarjeta de red,  seleccionamos modo NAT con cable conectado por defecto.

```
C:\Program Files\Oracle\VirtualBox>vboxmanage modifyvm Matrix --nic1 nat --nictype1 82540EM --cableconnected1 on

C:\Program Files\Oracle\VirtualBox>
```

Arrancamos máquina virtual

```
C:\Program Files\Oracle\VirtualBox>Vboxmanage startvm Matrix
Waiting for VM "Matrix" to power on...
VM "Matrix" has been successfully started.
```

Se carga la máquina virtual