

Práctica 1-SWAP

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1-Pasos para conectar las maquinas

Tras completar la instalación por defecto de Ubuntu-server y tener instalado Php+Apache+Mysql podemos comenzar a cambiar las Ips. Primero tenemos que añadir una conexión host-only en Virtual-box en cada máquina. Ahora procedemos a iniciar las máquinas y lanzar “ifconfig -a” para chequear que el adaptador nuevo se ha conectado (enp0s8). A continuación, tenemos que modificar el archivo “/etc/network/interfaces” añadiéndoles las siguientes líneas:

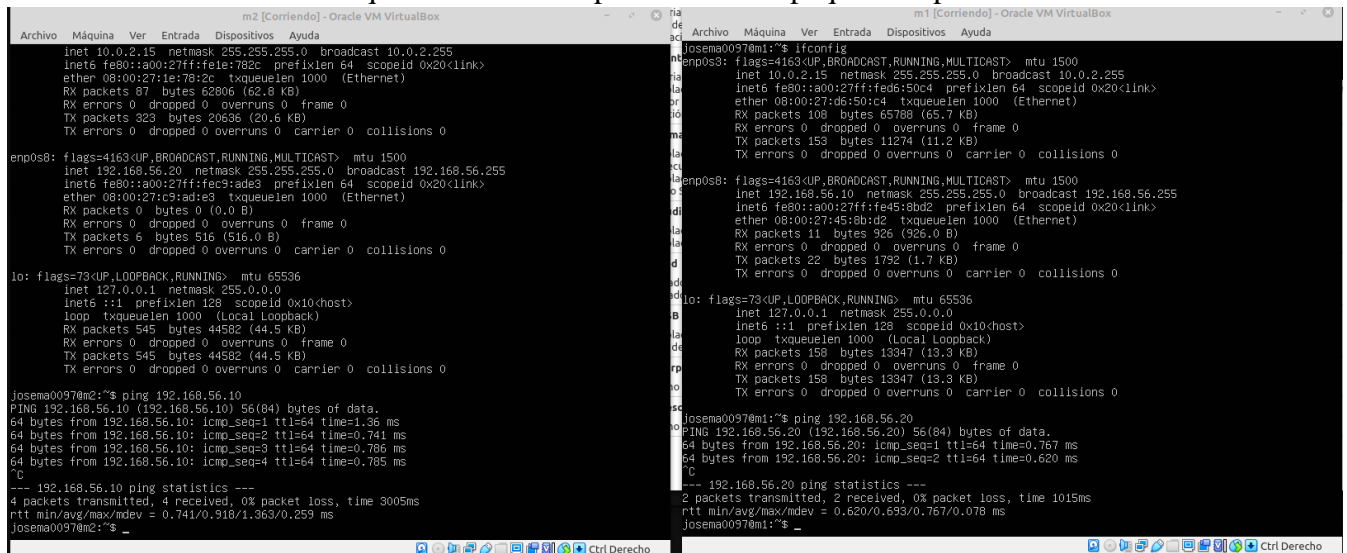
```
auto enp0s8
```

```
iface enp0s8 inet static
```

```
address 192.168.56.10
```

```
netmask 255.255.255.0
```

Para concluir solo tenemos que levantar el dispositivo con el paquete ifupdown.



```
m2 [Corriendo] - Oracle VM VirtualBox
Archivo Máquina Ver Entrada Dispositivos Ayuda
Inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
Inet6 fe80::a00:27ff:fe1e:782c prefixlen 64 scopeid 0x20<link>
ether 08:00:27:1e:78:2c txqueuelen 1000 (Ethernet)
RX packets 87 bytes 62806 (62.8 KB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 323 bytes 20636 (20.6 KB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

enp0s8: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
Inet 192.168.56.20 netmask 255.255.255.0 broadcast 192.168.56.255
Inet6 fe80::a00:27ff:fed6:50c4 prefixlen 64 scopeid 0x20<link>
ether 08:00:27:1e:78:2c txqueuelen 1000 (Ethernet)
RX packets 0 bytes 0 (0.0 B)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 6 bytes 516 (516.0 B)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
Inet 127.0.0.1 netmask 255.0.0.0
Inet6 ::1 prefixlen 128 scopeid 0x10<host>
loop txqueuelen 1000 (Local Loopback)
RX packets 545 bytes 44582 (44.5 KB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 545 bytes 44582 (44.5 KB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

Josema0097@m2:~$ ping 192.168.56.10
PING 192.168.56.10 (192.168.56.10) 56(84) bytes of data:
64 bytes from 192.168.56.10: icmp_seq=1 ttl=64 time=1.36 ms
64 bytes from 192.168.56.10: icmp_seq=2 ttl=64 time=0.741 ms
64 bytes from 192.168.56.10: icmp_seq=3 ttl=64 time=0.786 ms
64 bytes from 192.168.56.10: icmp_seq=4 ttl=64 time=0.785 ms
^C
--- 192.168.56.10 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3005ms
rtt min/avg/max/mdev = 0.741/0.918/1.363/0.253 ms
Josema0097@m2:~$ _

m1 [Corriendo] - Oracle VM VirtualBox
Archivo Máquina Ver Entrada Dispositivos Ayuda
Josema0097@m1:~$ ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
Inet 10.0.2.15 netmask 255.255.255.0 broadcast 10.0.2.255
Inet6 fe80::a00:27ff:fed6:50c4 prefixlen 64 scopeid 0x20<link>
ether 08:00:27:1e:78:2c txqueuelen 1000 (Ethernet)
RX packets 108 bytes 65788 (65.7 KB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 153 bytes 11274 (11.2 KB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

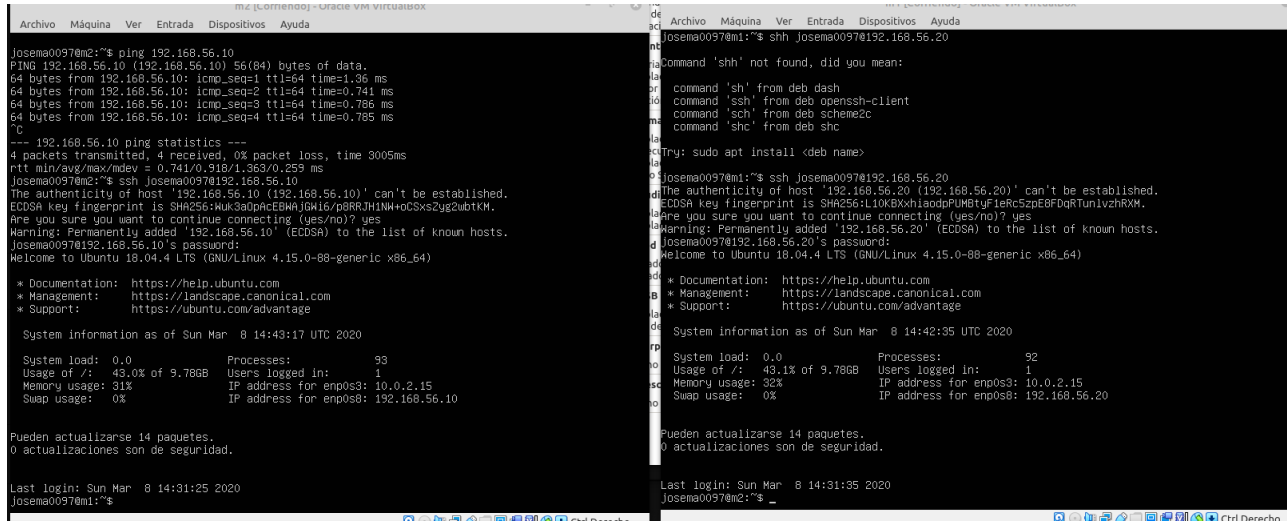
enp0s8: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
Inet 192.168.56.10 netmask 255.255.255.0 broadcast 192.168.56.255
Inet6 fe80::a00:27ff:fe45:8bd2 prefixlen 64 scopeid 0x20<link>
ether 08:00:27:45:8b:d2 txqueuelen 1000 (Ethernet)
RX packets 11 bytes 926 (926.0 B)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 22 bytes 1792 (1.7 KB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
Inet 127.0.0.1 netmask 255.0.0.0
Inet6 ::1 prefixlen 128 scopeid 0x10<host>
loop txqueuelen 1000 (Local Loopback)
RX packets 158 bytes 13347 (13.3 KB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 158 bytes 13347 (13.3 KB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

Josema0097@m1:~$ ping 192.168.56.20
PING 192.168.56.20 (192.168.56.20) 56(84) bytes of data:
64 bytes from 192.168.56.20: icmp_seq=1 ttl=64 time=0.767 ms
64 bytes from 192.168.56.20: icmp_seq=2 ttl=64 time=0.620 ms
^C
--- 192.168.56.20 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1015ms
rtt min/avg/max/mdev = 0.620/0.693/0.767/0.078 ms
Josema0097@m1:~$ _
```

2-SSH

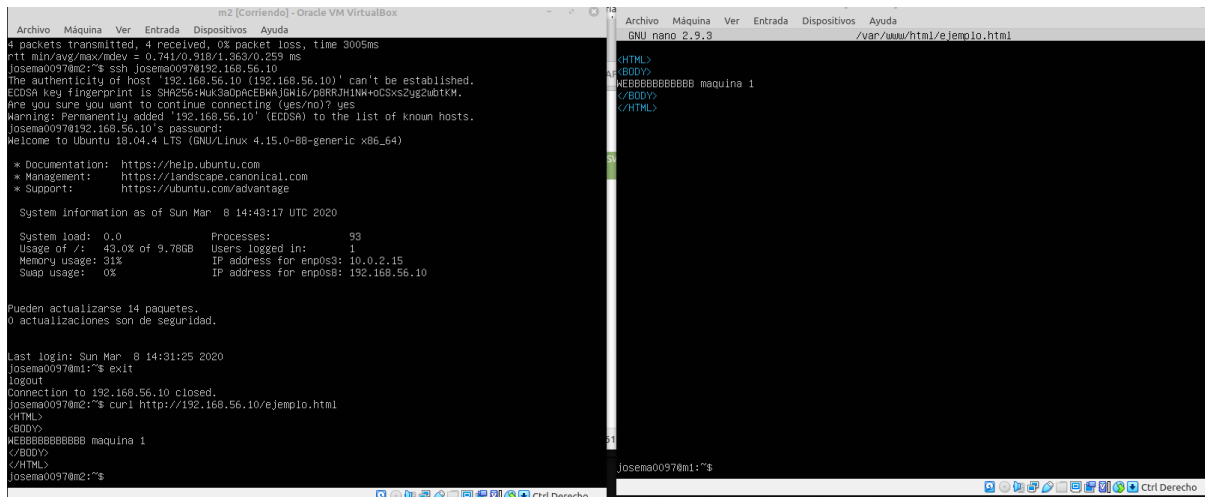
Para hacer ssh solo tenemos que ejecutar la orden: `ssh usuario@IPmaquina`. En mi caso sería [josema0097@192.168.56.20](ssh:josema0097@192.168.56.20) y [josema0097@192.168.56.10](ssh:josema0097@192.168.56.10).



The image shows two side-by-side terminal windows from an Oracle VM VirtualBox. The left window shows a user on IP 192.168.56.10 (josema0097@m2) pinging 192.168.56.10 and then successfully establishing an SSH connection to 192.168.56.20 (josema0097@m1). The right window shows the user on IP 192.168.56.20 (josema0097@m1) attempting to run 'ssh' but getting an error, then installing 'openssh-client' with 'sudo apt install', and finally successfully establishing an SSH connection back to 192.168.56.10. Both windows show system information and update status at the bottom.

3-HTML

Para este último apartado solo tenemos que crear en `/var/www/html/` una web de ejemplo y después hacer peticiones entre las maquinas con curl.



The image shows two side-by-side terminal windows. The left window shows a user on IP 192.168.56.10 (josema0097@m2) establishing an SSH connection to 192.168.56.20 (josema0097@m1) and then running 'curl http://192.168.56.10/ejemplo.html'. The right window shows the user on IP 192.168.56.20 (josema0097@m1) editing a file in nano at /var/www/html/ejemplo.html, creating a simple HTML page with the text 'maquina 1'. The left window also shows the user running 'exit' and 'logout'.

