

Apellidos, Nombre: Amado Cibreiro Andrés

Servidor sin conexión a la red



1. Servidor sin conexión a a la red

1. En la empresa para la que trabajamos tenemos un servidor con sistema operativo Debian virtualizado. Resulta que los usuarios se están quejando de que el servidor no es accesible. Investiga que le sucede al servidor e indica como se puede solucionar este incidente. Incluye las capturas de pantallas sean precisas para poder documentar la resolución del incidente.

Tiene en cuenta que según el departamento de administración de redes, los datos de red correspondientes la este servidor son:

IP: 10.0.2.15/24

Boadcast: 10.0.2.255

Puerta de enlace: 10.0.2.2

DNS:10.0.2.3

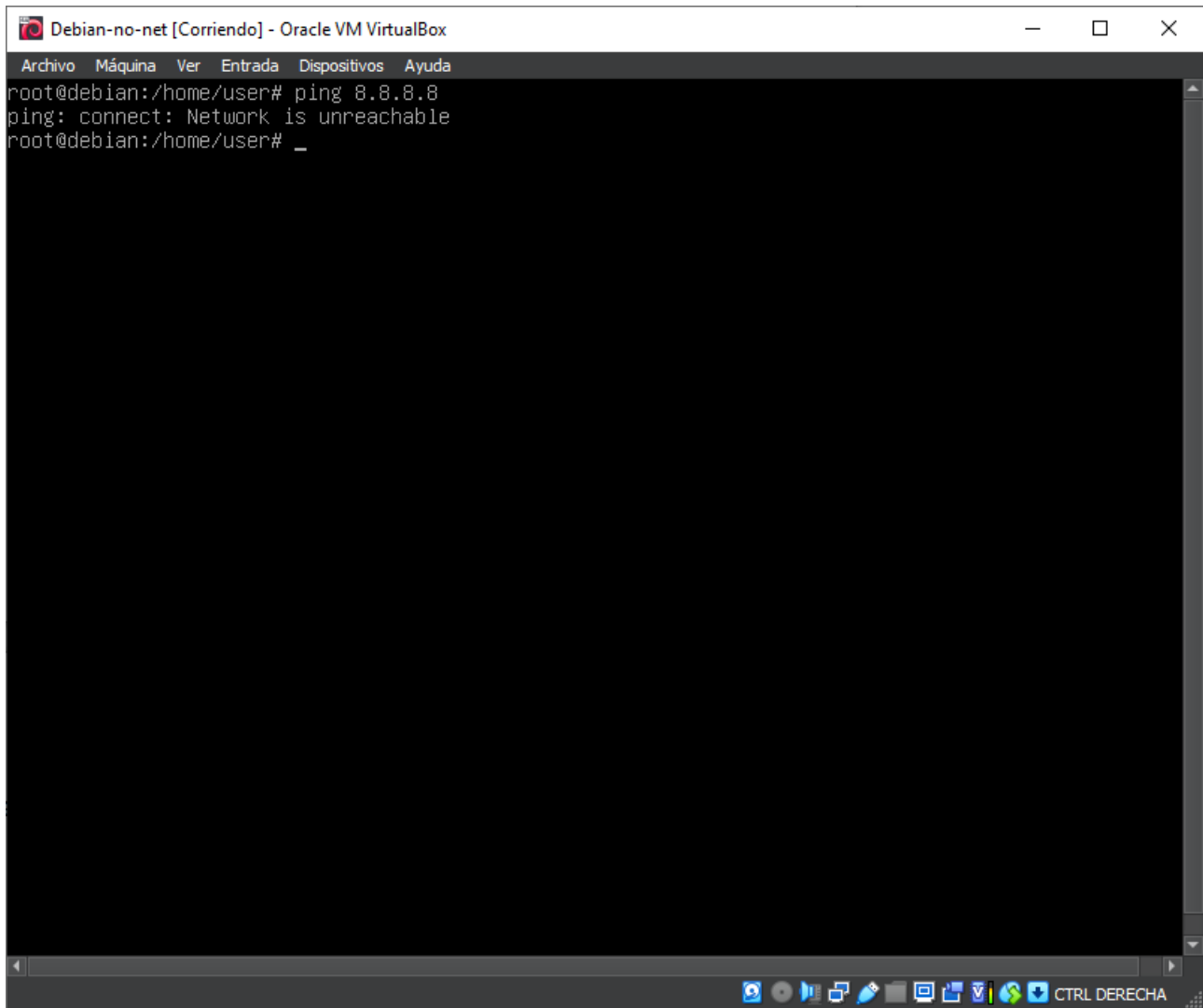
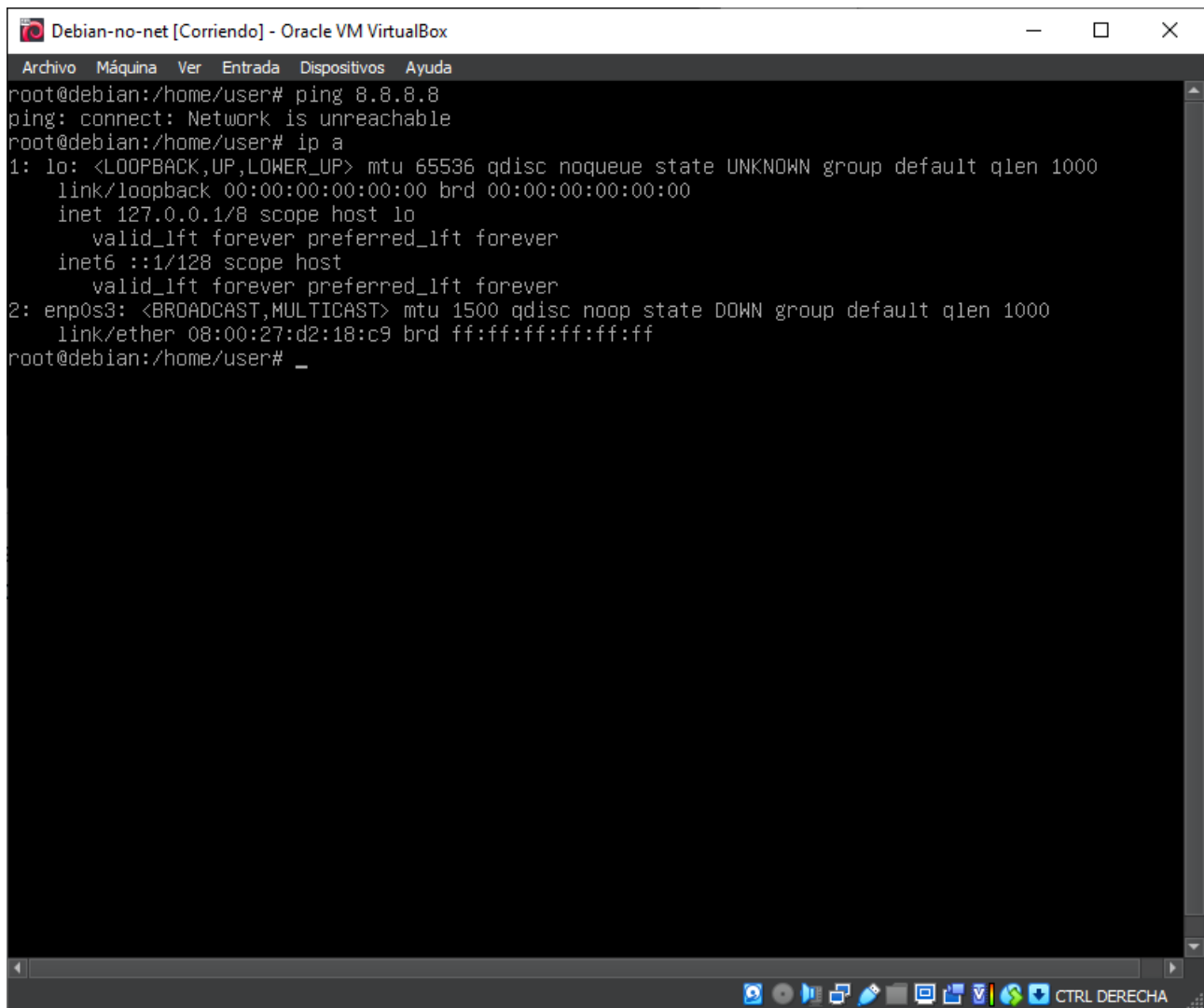


Figura 1: Prueba de conectividad

Para ver lo que sucede vamos a probar a ver si la máquina tiene acceso a Internet haciendo ping a 8.8.8.8.

No tenemos acceso a la red.



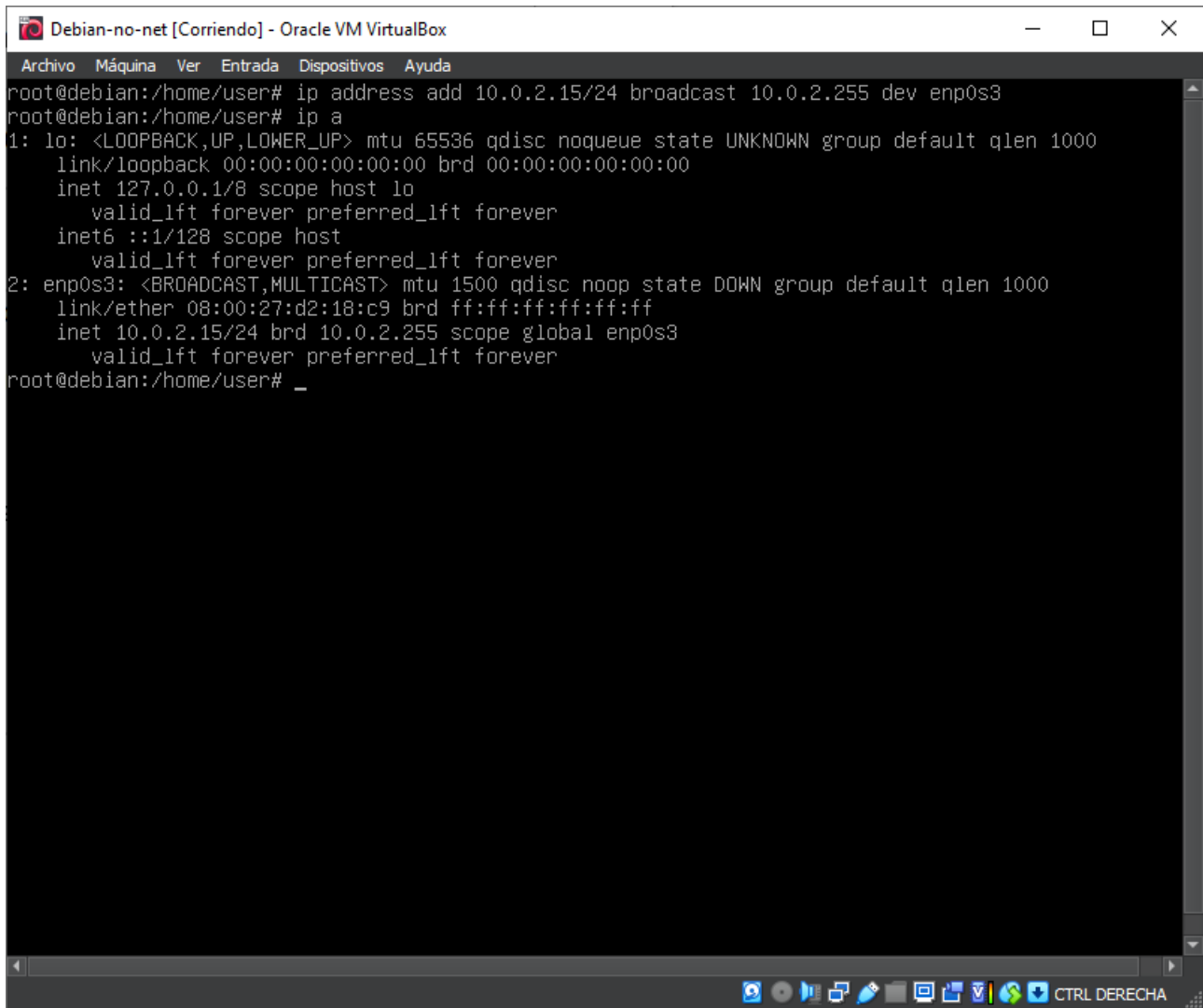
The screenshot shows a terminal window titled "Debian-no-net [Corriendo] - Oracle VM VirtualBox". The terminal output is as follows:

```
root@debian:/home/user# ping 8.8.8.8
ping: connect: Network is unreachable
root@debian:/home/user# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST> mtu 1500 qdisc noop state DOWN group default qlen 1000
    link/ether 08:00:27:d2:18:c9 brd ff:ff:ff:ff:ff:ff
root@debian:/home/user# _
```

The terminal window has a menu bar with "Archivo", "Máquina", "Ver", "Entrada", "Dispositivos", and "Ayuda". The bottom of the window shows a taskbar with various icons and the text "CTRL DERECHA".

Figura 2: Comprobación de direcciones IP

ip a

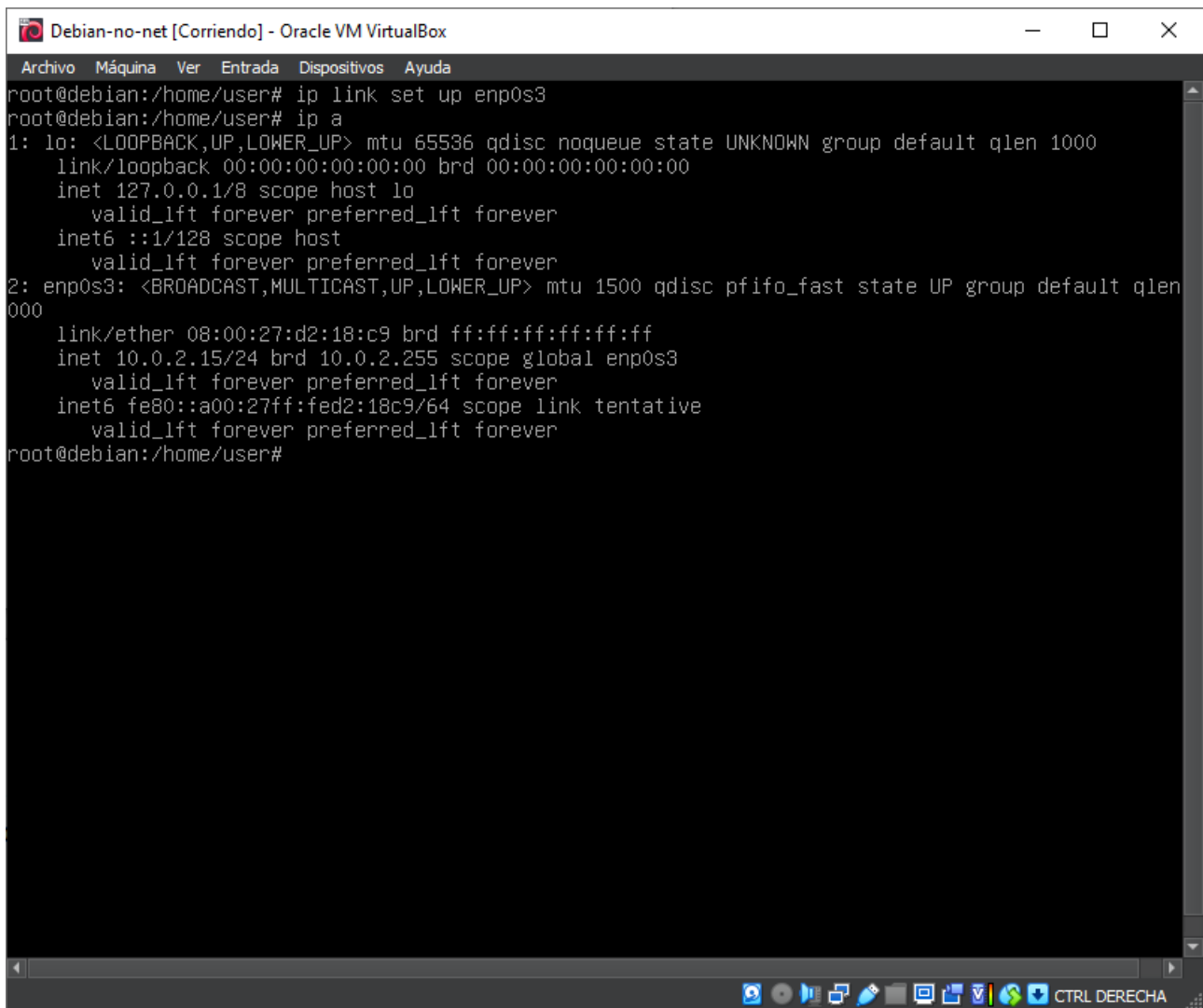


```
Debian-no-net [Corriendo] - Oracle VM VirtualBox
Archivo  Máquina  Ver  Entrada  Dispositivos  Ayuda
root@debian:/home/user# ip address add 10.0.2.15/24 broadcast 10.0.2.255 dev enp0s3
root@debian:/home/user# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST> mtu 1500 qdisc noop state DOWN group default qlen 1000
    link/ether 08:00:27:d2:18:c9 brd ff:ff:ff:ff:ff:ff
    inet 10.0.2.15/24 brd 10.0.2.255 scope global enp0s3
        valid_lft forever preferred_lft forever
root@debian:/home/user# _
```

Figura 3: Añadiendo la dirección del servidor

```
ip address add 10.0.2.15/24 broadcast 10.0.2.255 dev enp0s3
```

```
ip a
```



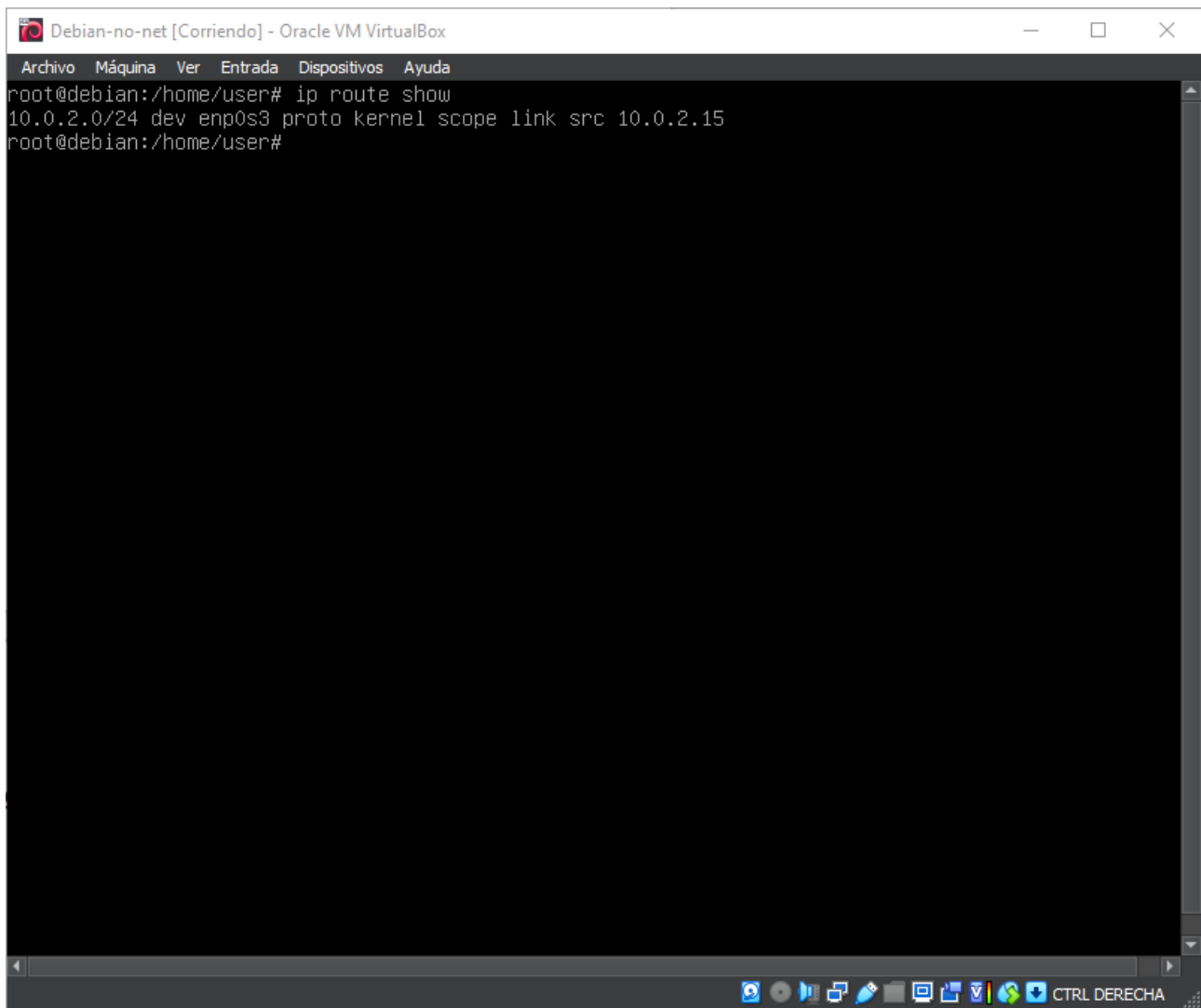
```
Debian-no-net [Corriendo] - Oracle VM VirtualBox
Archivo  Máquina  Ver  Entrada  Dispositivos  Ayuda
root@debian:/home/user# ip link set up enp0s3
root@debian:/home/user# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen
000
    link/ether 08:00:27:d2:18:c9 brd ff:ff:ff:ff:ff:ff
    inet 10.0.2.15/24 brd 10.0.2.255 scope global enp0s3
        valid_lft forever preferred_lft forever
    inet6 fe80::a00:27ff:fed2:18c9/64 scope link tentative
        valid_lft forever preferred_lft forever
root@debian:/home/user#
```

Figura 4: IP link set up

La interfaz no está habilitada porque se puede ver que pone “DOWN”. Para activarla:

```
ip link set up enp0s3
```

```
ip a
```



The image shows a terminal window titled "Debian-no-net [Corriendo] - Oracle VM VirtualBox". The window has a menu bar with "Archivo", "Máquina", "Ver", "Entrada", "Dispositivos", and "Ayuda". The terminal content shows the following commands and output:

```
root@debian:/home/user# ip route show
10.0.2.0/24 dev enp0s3 proto kernel scope link src 10.0.2.15
root@debian:/home/user#
```

The terminal window has a dark background. At the bottom, there is a taskbar with various icons and the text "CTRL DERECHA".

Figura 5: IP route show

Verificara si la dirección IP tiene algún puerto de enlace con ip route show.

No tiene ningún puerto de enlace asociado, hay que asignarlo

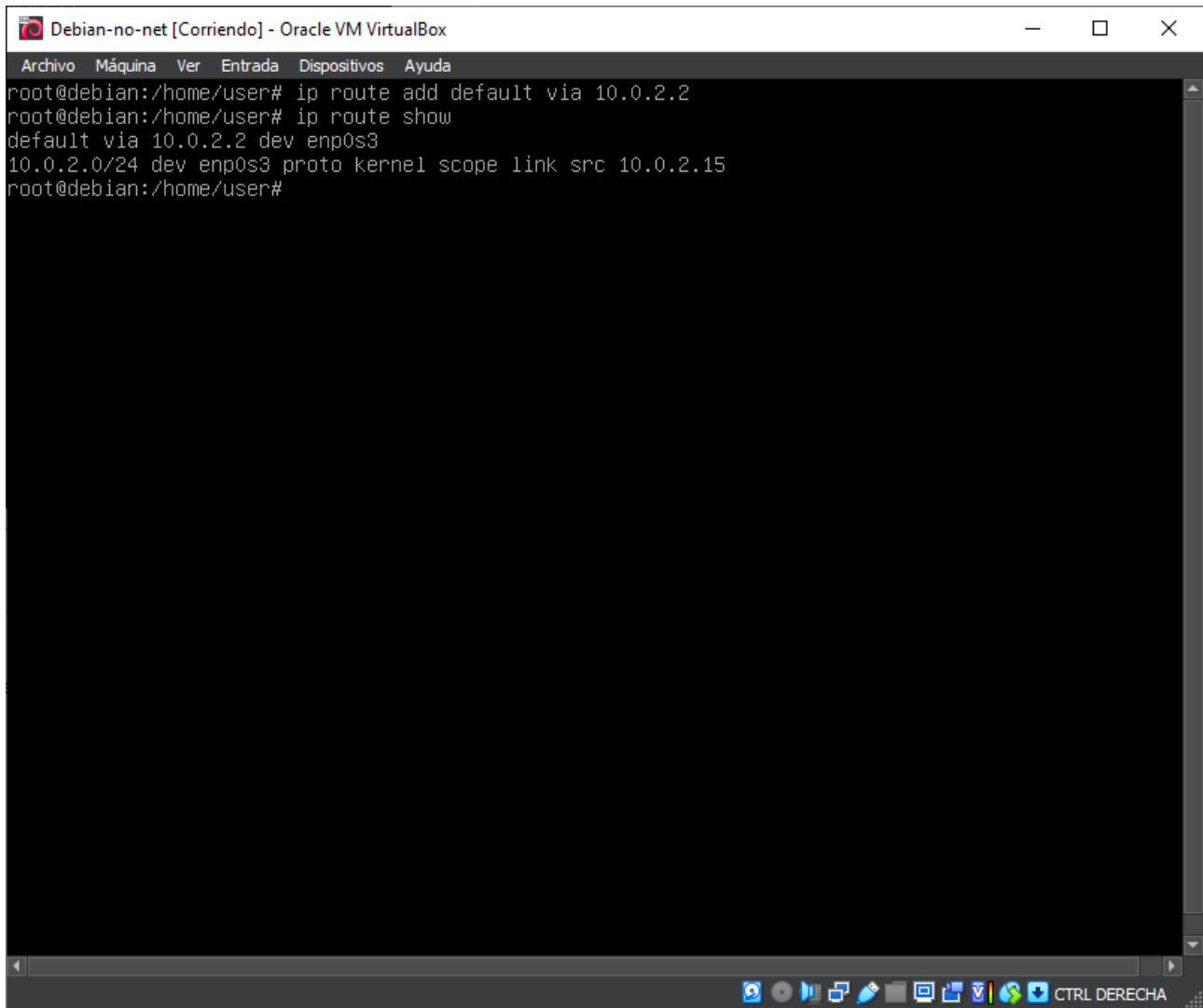


Figura 6: Añadir puerto de enlace

```
ip route add default via 10.0.2.2
```

```
ip route show
```

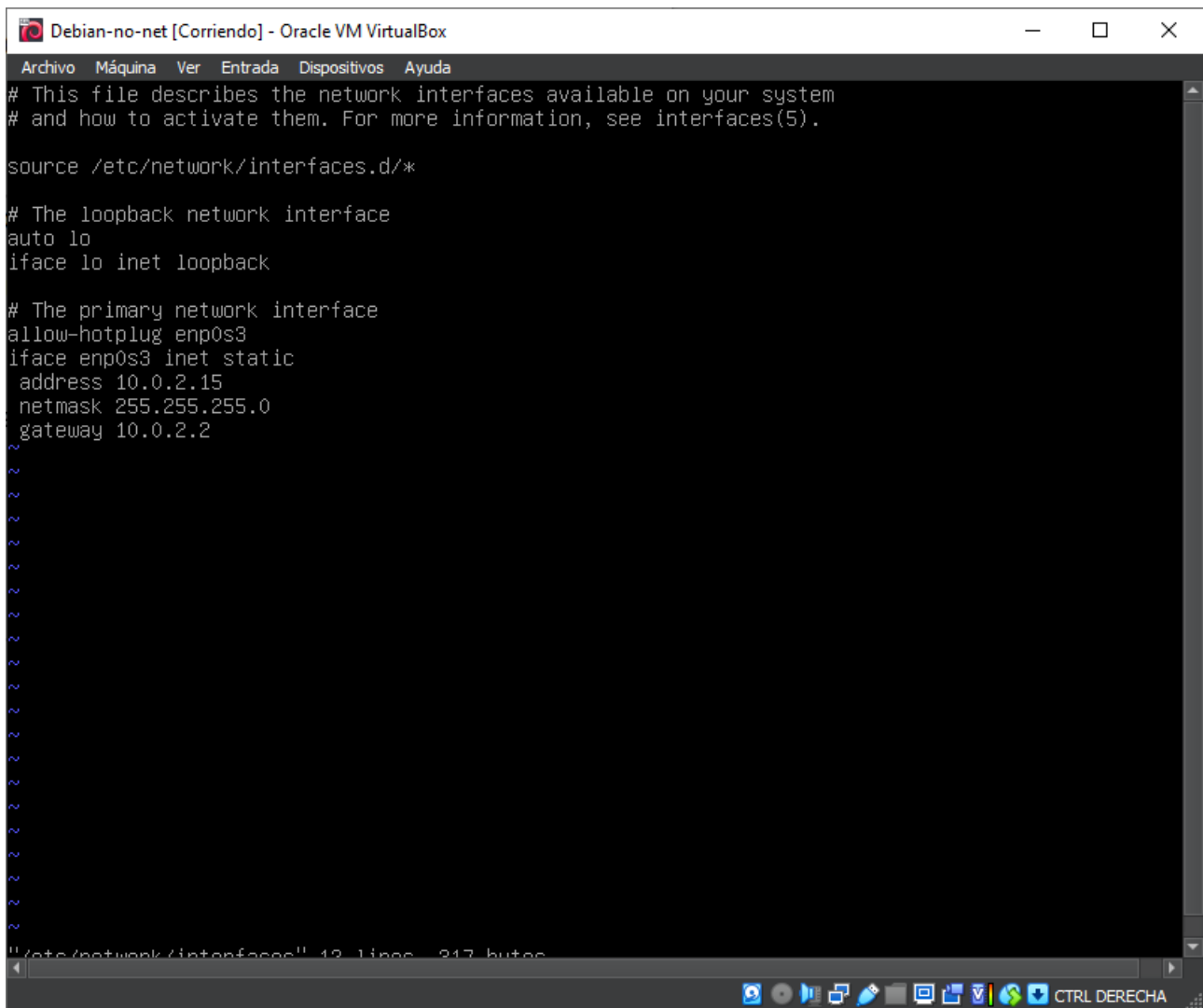


Figura 7: vi /etc/network/interfaces

```
vi /etc/network/interfaces
```

Borramos "dhcp" por "static" y añadimos el resto

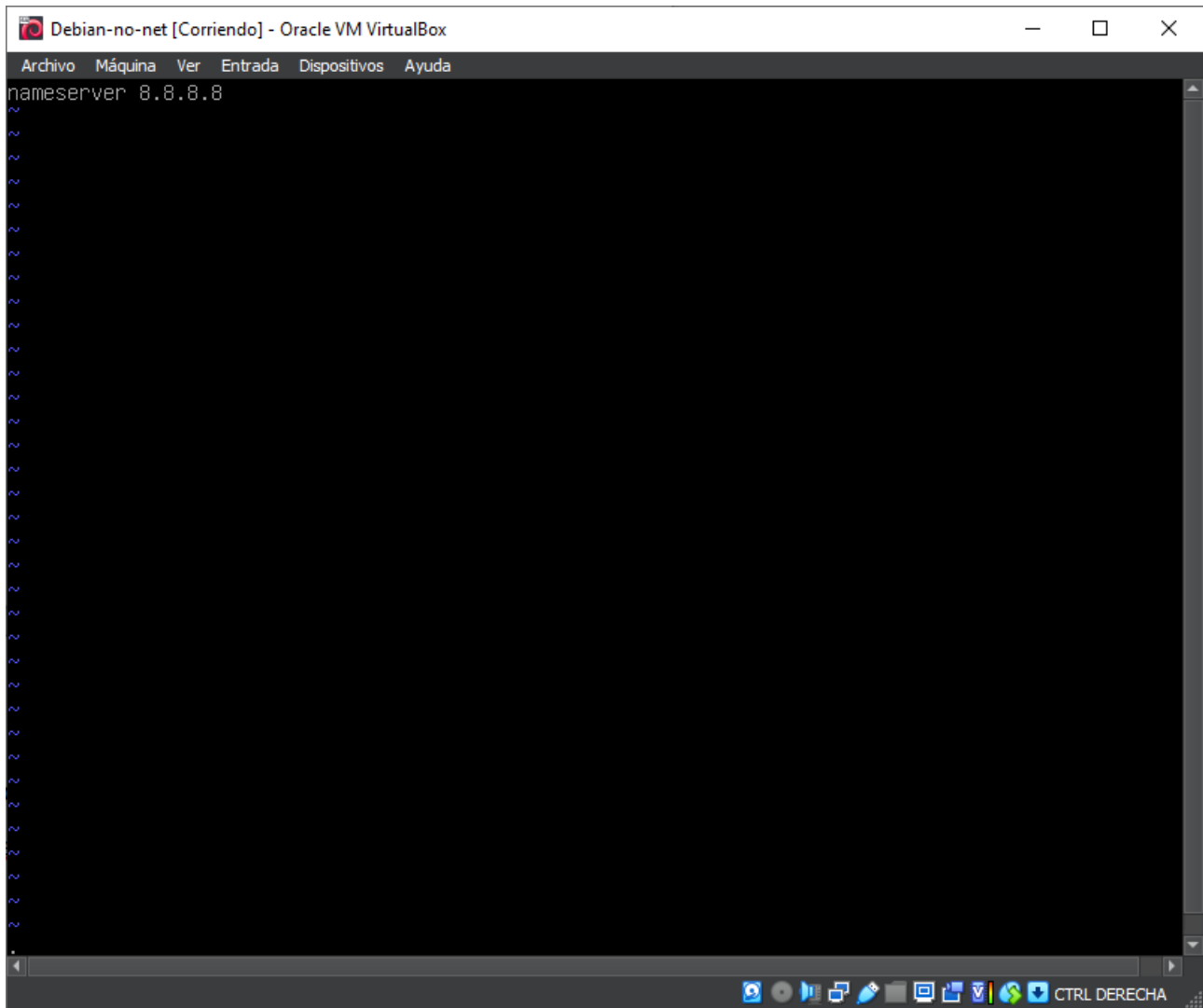
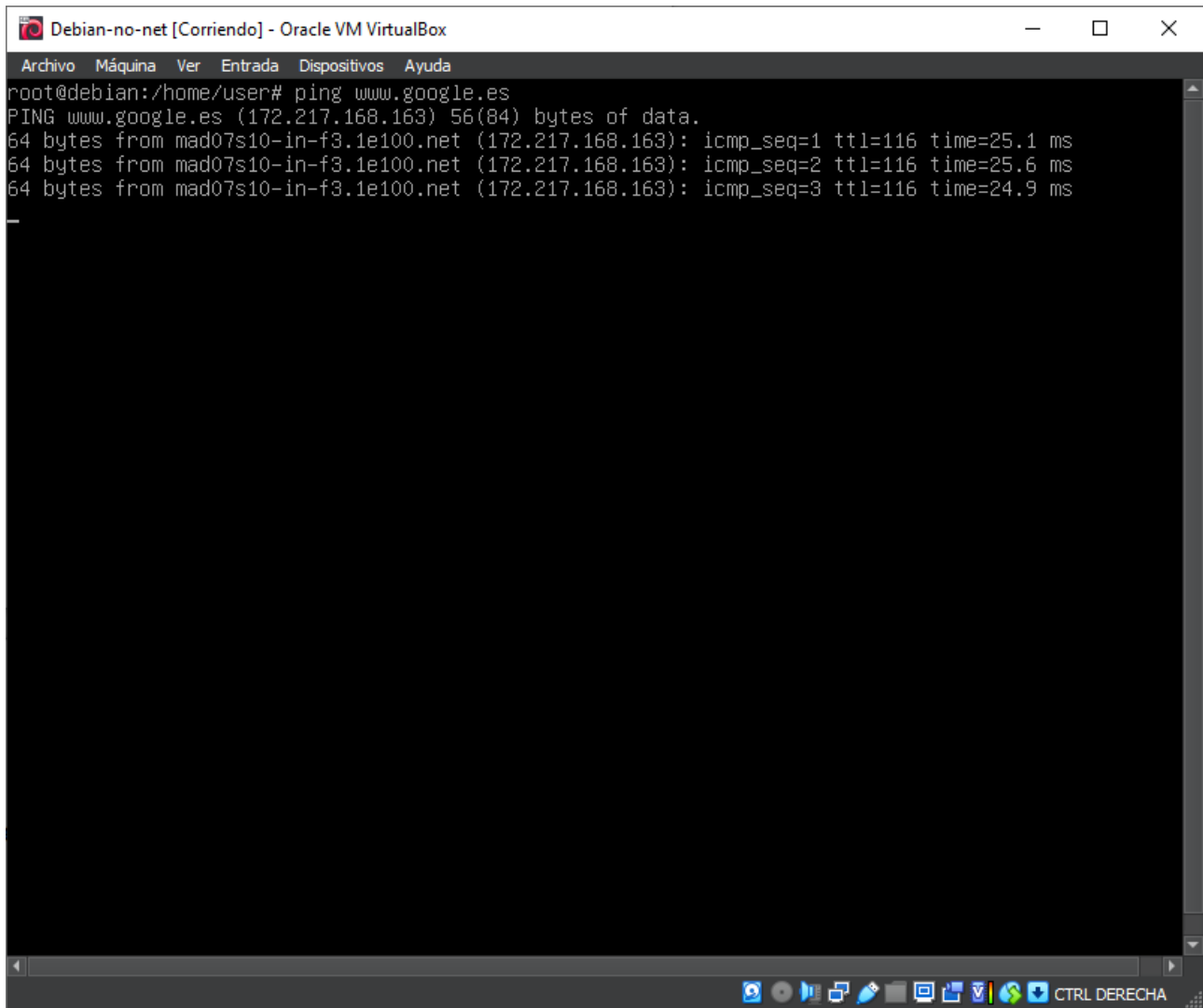


Figura 8: vi /etc/resolv.conf

vi /etc/resolv.conf

Borramos todo

nameserver 8.8.8.8



The image shows a terminal window titled "Debian-no-net [Corriendo] - Oracle VM VirtualBox". The terminal displays the output of a ping command executed from the root user at the /home/user directory. The command is "ping www.google.es". The output shows three successful ping attempts, each receiving 64 bytes of data from the IP address 172.217.168.163. The first attempt has an icmp_seq of 1 and a time of 25.1 ms. The second attempt has an icmp_seq of 2 and a time of 25.6 ms. The third attempt has an icmp_seq of 3 and a time of 24.9 ms. The terminal window has a menu bar with "Archivo", "Máquina", "Ver", "Entrada", "Dispositivos", and "Ayuda". The bottom of the window shows a taskbar with various icons and the text "CTRL DERECHA".

```
root@debian:/home/user# ping www.google.es
PING www.google.es (172.217.168.163) 56(84) bytes of data.
64 bytes from mad07s10-in-f3.1e100.net (172.217.168.163): icmp_seq=1 ttl=116 time=25.1 ms
64 bytes from mad07s10-in-f3.1e100.net (172.217.168.163): icmp_seq=2 ttl=116 time=25.6 ms
64 bytes from mad07s10-in-f3.1e100.net (172.217.168.163): icmp_seq=3 ttl=116 time=24.9 ms
```

Figura 9: Comprobación

Ahora el ping a www.google.es funciona