

(2024-2C) Computación Aplicada

TP Integrador

Grupo 1

- Paz Lucas
- Paz Luciano
- Rodriguez Carmauta Gabriel Jesus
- Romero Garcia Juan Cruz
- Taphanel Facundo
- Escudero Mauro Joaquin

Instalación de servidor SSH

En la vm `caservidor` (usando el usuario root):

1. Instalar el servidor SSH con `apt` :

```
apt install openssh-client
```

2. Obtener la IP de la vm:

```
ip addr show
```

3. Comprobar desde local o otra vm que está funcionando correctamente:

```
ssh usuario-caservidor@ip-vm
```

Reemplazar `usuario-caservidor` con el nombre del usuario de la vm `caservidor`
y reemplazar `ip-vm` con la ip obtenida en el paso anterior

Instalación y configuración del DHCP

En la vm `caservidor` (usando el usuario root):

1. Instalar el servidor DHCP y net tools con `apt` :

```
apt install isc-dhcp-server net-tools
```

2. Crear el archivo `/etc/default/isc-dhcp-server` con el siguiente contenido:

```
INTERFACES="enp0s1"
```

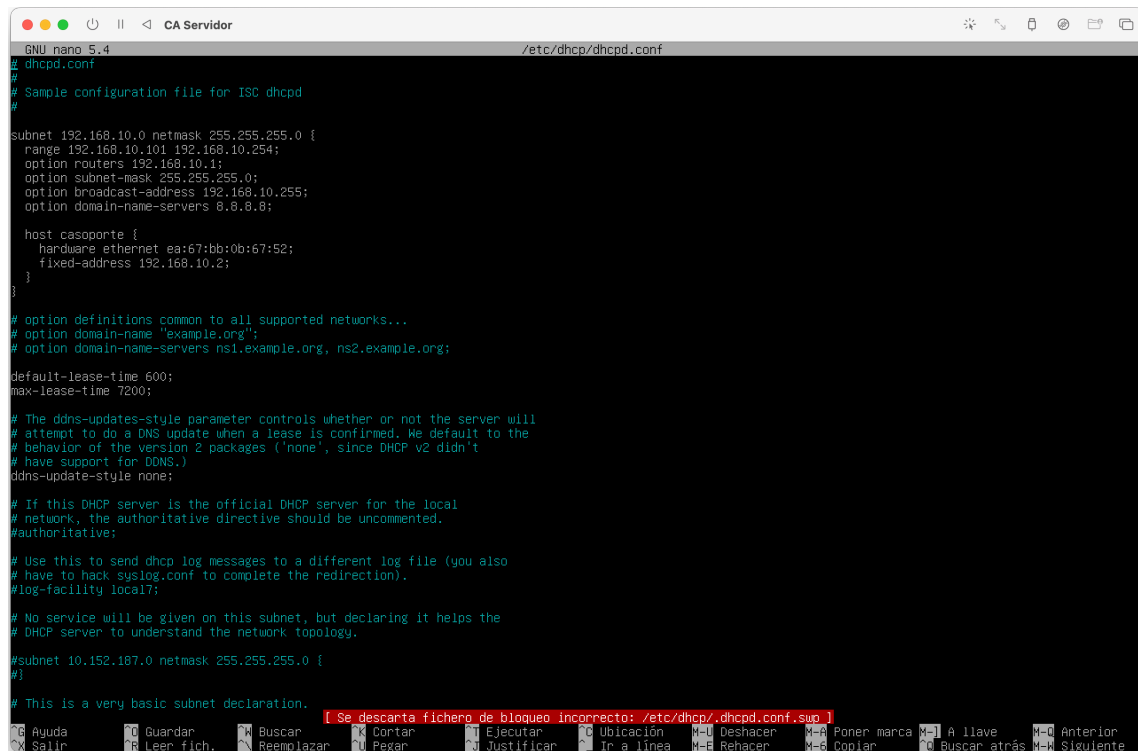
1. Agregar al archivo `/etc/dhcp/dhcpd.conf` el siguiente contenido:

(la mac address `00:00:00:00:00:00` debe ser reemplazada con la de la vm de `casoporte`)

```
subnet 192.168.10.0 netmask 255.255.255.0 {
    range 192.168.10.101 192.168.10.254;
    option routers 192.168.10.1;
    option subnet-mask 255.255.255.0;
    option broadcast-address 192.168.10.255;
    option domain-name-servers 8.8.8.8;

    host casoporte {
        hardware ethernet 00:00:00:00:00:00;
        fixed-address 192.168.10.2;
    }
}
```

Debe quedar como la siguiente imagen:



The screenshot shows a terminal window titled "CA Servidor" with the nano editor open to the file "/etc/dhcp/dhcpd.conf". The file content is as follows:

```
GNU nano 5.4 /etc/dhcp/dhcpd.conf
dhcpd.conf
#
# Sample configuration file for ISC dhcpd
#

subnet 192.168.10.0 netmask 255.255.255.0 {
  range 192.168.10.101 192.168.10.254;
  option routers 192.168.10.1;
  option subnet-mask 255.255.255.0;
  option broadcast-address 192.168.10.255;
  option domain-name-servers 8.8.8.8;

  host casoporte {
    hardware ethernet ea:67:bb:0b:67:52;
    fixed-address 192.168.10.2;
  }
}

# option definitions common to all supported networks...
# option domain-name 'example.org';
# option domain-name-servers ns1.example.org, ns2.example.org;

default-lease-time 600;
max-lease-time 7200;

# The ddns-updates-style parameter controls whether or not the server will
# attempt to do a DNS update when a lease is confirmed. We default to the
# behavior of the version 2 packages ('none', since DHCP v2 didn't
# have support for DDNS.)
# have support for DDNS.)
ddns-update-style none;

# If this DHCP server is the official DHCP server for the local
# network, the authoritative directive should be uncommented.
#authoritative;

# Use this to send dhcp log messages to a different log file (you also
# have to hack syslog.conf to complete the redirection).
#log-facility local7;

# No service will be given on this subnet, but declaring it helps the
# DHCP server to understand the network topology.

#subnet 10.152.187.0 netmask 255.255.255.0 {
#}

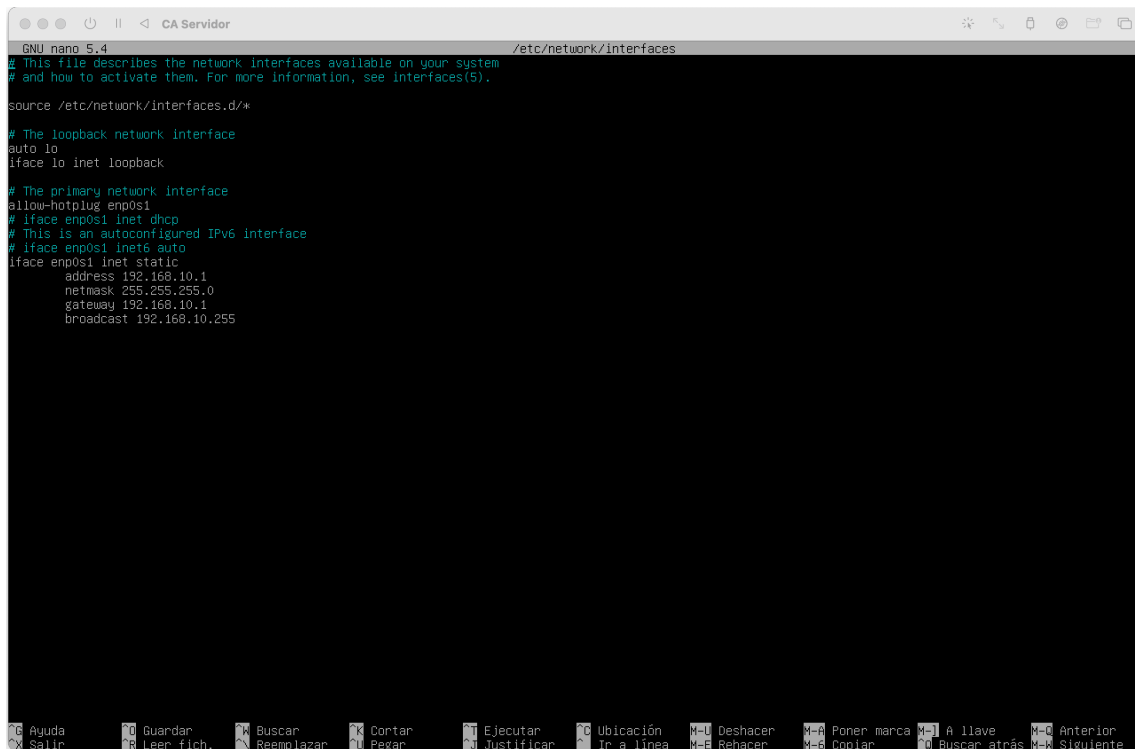
# This is a very basic subnet declaration.
```

A red error message is visible at the bottom of the terminal: "[Se descarta fichero de bloqueo incorrecto: /etc/dhcp/dhcpd.conf.swp]". The nano editor's status bar at the bottom shows various navigation and editing shortcuts.

4. Agregar al archivo `/etc/network/interfaces` el siguiente contenido:

```
iface enp0s1 inet static
    address 192.168.10.1
    netmask 255.255.255.0
    gateway 192.168.10.1
    broadcast 192.168.10.255
```

Debe quedar como la siguiente imagen:



The screenshot shows a terminal window titled 'CA Servidor' with the GNU nano 5.4 editor open to the file /etc/network/interfaces. The file contains the following configuration:

```
GNU nano 5.4 /etc/network/interfaces
# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

source /etc/network/interfaces.d/*

# The loopback network interface
auto lo
iface lo inet loopback

# The primary network interface
allow-hotplug enp0s1
# iface enp0s1 inet dhcp
# This is an autoconfigured IPv6 interface
# iface enp0s1 inet6 auto
iface enp0s1 inet static
    address 192.168.10.1
    netmask 255.255.255.0
    gateway 192.168.10.1
    broadcast 192.168.10.255
```

The bottom of the terminal shows a standard nano editor status bar with various keyboard shortcuts like 'Ayuda', 'Guardar', 'Buscar', etc.

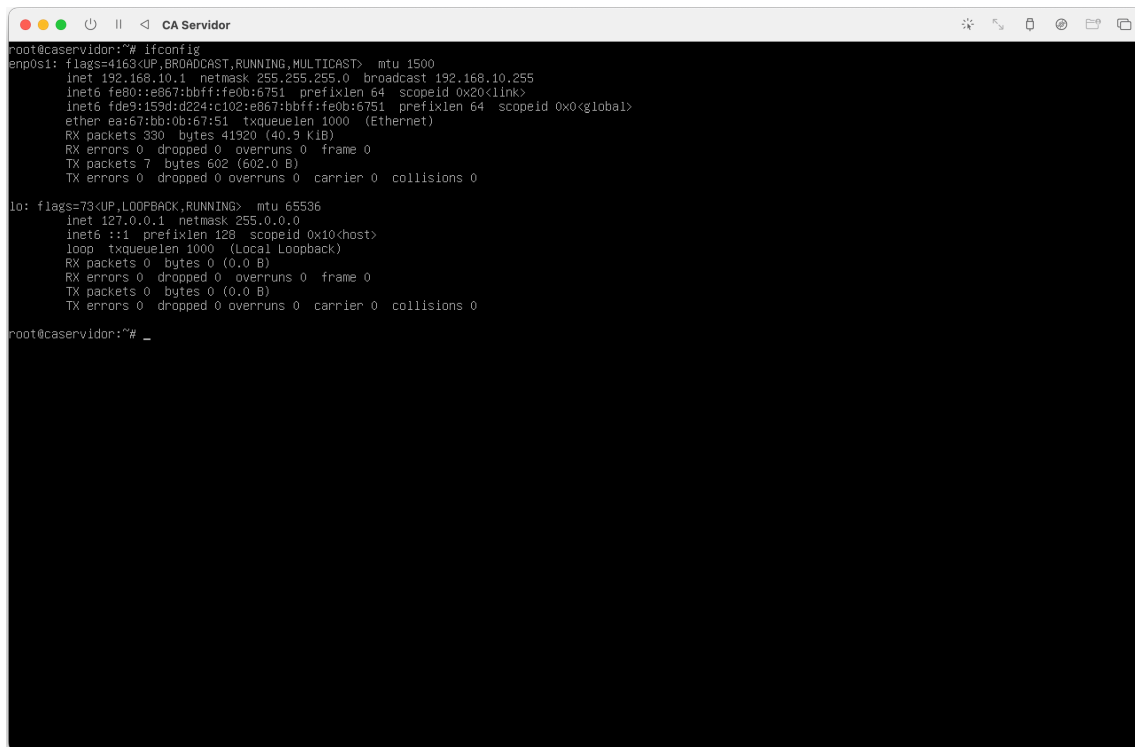
5. Reiniciar el servidor DHCP:

```
systemctl restart isc-dhcp-server
```

6. Confirmar con `ifconfig` que la vm haya tomado la ip correcta:

```
ifconfig
```

Se debe visualizar como la siguiente imagen:



```
root@caservidor:~# ifconfig
enp0s1: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
    inet 192.168.10.1  netmask 255.255.255.0  broadcast 192.168.10.255
    inet6 fe80:a867:bbff:fe0b:6751  prefixlen 64  scopeid 0x20<link>
    inet6 fde9:159d:d24:c102:a067:bbff:fe0b:6751  prefixlen 64  scopeid 0x0<global>
    ether aa:67:bb:0b:67:51  txqueuelen 1000  (Ethernet)
    RX packets 330  bytes 41920 (40.9 KiB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 7  bytes 602 (602.0 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 0  bytes 0 (0.0 B)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 0  bytes 0 (0.0 B)
    TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

root@caservidor:~# _
```