

# Conf de red, dhcp y crear router en Debian

miércoles, 27 de septiembre de 2023 13:54

Hemos creado una máquina virtual con debian 12 sin entorno gráfico y hemos añadido dos adaptadores de red, uno nat y otro custom y metíamos la VMnet4 luego le damos a generar mac y cambiamos los dos últimos dígitos para tenerlos localizados para saber que adaptador de red es cada uno al hacer un ip a

```
GNU nano 7.2 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

# Adaptador publico NAT (DHCP)
allow-hotplug ens32
iface ens32 inet dhcp

# Adaptador publico (estatico)
# auto ens32
# iface ens32 inet static
#     address 192.168.100.11
#     netmask 255.255.255.0
#     gateway 192.168.100.1
#     dns-nameserver 8.8.8.8
#     dns-nameserver 8.8.4.4
#     dns-search cr.loc

# Red interna (estatica)
auto ens33
iface ens33 inet static
    address 192.168.100.1
    netmask 255.255.255.0
```

```
root@rou100:/etc# service networking restart
root@rou100:/etc# _
```

Comando para restablecer el servicio de red

```
GNU nano 7.2 etc/apt/sources.list
# deb cdrom:[Debian GNU/Linux 12.1.0 _Bookworm_ - Official 1386 DVD Binary-1 with f

# Seguridad
deb http://security.debian.org/debian-security bullseye-security main contrib
deb-src http://security.debian.org/debian-security bullseye-security main contrib

# Debian
deb http://deb.debian.org/debian bullseye main
deb-src http://deb.debian.org/debian bullseye main

# Updates
deb http://deb.debian.org/debian bullseye-updates main
deb-src http://deb.debian.org/debian bullseye-updates main
```

Para que las actualizaciones funcionen correctamente hay que modificar de donde va a coger la informacion de las actualizaciones

```
root@rou100:/# apt-get install isc-dhcp-server_
```

Descargamos el isc para el servicio dhcp

```
GNU nano 7.2                                dhcpd.conf
# dhcpd.conf
#
# Sample configuration file for ISC dhcpd
#
# 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;

# Configuración del ámbito DHCP
subnet 192.168.100.0 netmask 255.255.255.0 {
    range 192.168.100.101 192.168.100.200;
    option subnet-mask 255.255.255.0;
    option routers 192.168.100.1;
    option domain-name-servers 8.8.8.8, 8.8.4.4;
    option domain-name "cr.loc";
}
_
```

```
GNU nano 7.2                                /etc/default/isc-dhcp-server
# Defaults for isc-dhcp-server (sourced by /etc/init.d/isc-dhcp-server)

# Path to dhcpd's config file (default: /etc/dhcp/dhcpd.conf).
#DHCPDv4_CONF=/etc/dhcp/dhcpd.conf
#DHCPDv6_CONF=/etc/dhcp/dhcpd6.conf

# Path to dhcpd's PID file (default: /var/run/dhcpd.pid).
#DHCPDv4_PID=/var/run/dhcpd.pid
#DHCPDv6_PID=/var/run/dhcpd6.pid

# Additional options to start dhcpd with.
# Don't use options -cf or -pf here; use DHCPD_CONF/ DHCPD_PID instead
#OPTIONS=""

# On what interfaces should the DHCP server (dhcpd) serve DHCP requests?
# Separate multiple interfaces with spaces, e.g. "eth0 eth1".
INTERFACESv4="ens33"
INTERFACESv6=""
```

```
root@rou100:/etc# service isc-dhcp-server start
root@rou100:/etc#
```

Crear router:



Instalación  
de un rou...

```
root@rou100:/etc# nft add table nat_
```

```
}
root@rou100:/etc# nft add chain nat postrouting { type nat hook prerouting priority 0\; }
```

```
}
root@rou100:/etc# nft add chain nat postrouting { type nat hook postrouting priority 100 \; }_
```

Si la direccion es dinamica: (si es estatica cambiamos masquerade por counter snat to IPV4 del router

```
root@rou100:/etc# nft add rule ip nat postrouting oifname "ens32" ip saddr 192.168.100.0/24 counter
masquerade
```

```
root@rou100:/etc# nft list ruleset
table ip nat {
    chain prerouting {
        type nat hook prerouting priority filter; policy accept;
    }

    chain postrouting {
        type nat hook postrouting priority srcnat; policy accept;
        oifname "ens32" ip saddr 192.168.100.0/24 counter packets 0 bytes 0 masquerade
    }
}
root@rou100:/etc#
```

```
GNU nano 7.2 /etc/sysctl.conf *
# Uncomment the next line to enable packet forwarding for IPv4
net.ipv4.ip_forward=1
# Uncomment the next line to enable packet forwarding for IPv6
```