

# M11 FIREWALL

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1.

```
2: enp5s0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 40:8d:5c:e2:7a:ca brd ff:ff:ff:ff:ff:ff
    inet 10.200.243.204/24 brd 10.200.243.255 scope global dynamic noprefixroute enp5s0
        valid_lft 21326sec preferred_lft 21326sec
    inet 172.100.205.2/24 scope global enp5s0
        valid_lft forever preferred_lft forever
    inet6 fe80::5b5a:ba16:3707:9a19/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
```

```
[root@i04 ~]# ip r
default via 172.100.205.1 dev enp5s0
default via 10.200.243.1 dev enp5s0 proto dhcp metric 100
10.200.243.0/24 dev enp5s0 proto kernel scope link src 10.200.243.204 metric 100
172.17.0.0/16 dev docker0 proto kernel scope link src 172.17.0.1 linkdown
172.18.0.0/16 dev br-6b447f813909 proto kernel scope link src 172.18.0.1 linkdown
172.25.0.0/16 dev docker_gwbridge proto kernel scope link src 172.25.0.1 linkdown
172.100.205.0/24 dev enp5s0 proto kernel scope link src 172.100.205.2
192.168.122.0/24 dev virbr0 proto kernel scope link src 192.168.122.1 linkdown
```

2.

```
2: enp5s0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 40:8d:5c:e2:7a:ca brd ff:ff:ff:ff:ff:ff
    inet 172.100.205.2/24 scope global enp5s0
        valid_lft forever preferred_lft forever
    inet6 fe80::428d:5cff:fee2:7aca/64 scope link
        valid_lft forever preferred_lft forever
```

```
[root@localhost ~]# ip r
default via 172.100.205.1 dev enp5s0
172.100.205.0/24 dev enp5s0 proto kernel scope link src 172.100.205.2
```

### 3. Accés des als hosts 10.200.243.205 i 10.200.243.227

```
[root@i04 ~]# telnet 10.200.243.205 13
Trying 10.200.243.205...
Connected to 10.200.243.205.
Escape character is '^]'.
23 APR 2021 10:26:49 CEST
Connection closed by foreign host.
```

```
[root@i04 ~]# telnet 10.200.243.227 13
Trying 10.200.243.227...
Connected to 10.200.243.227.
Escape character is '^]'.
23 APR 2021 10:27:00 CEST
Connection closed by foreign host.
```

```
[root@i04 ~]# telnet 10.200.243.205 80
Trying 10.200.243.205...
Connected to 10.200.243.205.
Escape character is '^]'.
^]
```

```
[root@i04 ~]# telnet 10.200.243.227 80
Trying 10.200.243.227...
Connected to 10.200.243.227.
Escape character is '^]'.
^]
```

### 4. Accés des del host i27 al host de la xarxa privada 172.100.205.2

```
[guest@i27 ~]$ ssh -p 2022 root@i05
root@i05's password:
"System is booting up. Unprivileged users are not permitted to log in yet. Please come back later. For technical details, see pam_nologin(8)."
```

Last login: Fri Apr 23 11:28:11 2021 from 10.200.243.227

```
[root@localhost ~]#
```

5.

```
# Regles flush
iptables -F
iptables -X
iptables -Z
iptables -t nat -F

# Politiques per defecte:
iptables -P INPUT ACCEPT
iptables -P OUTPUT ACCEPT
iptables -P FORWARD ACCEPT
iptables -t nat -P PREROUTING ACCEPT
iptables -t nat -P POSTROUTING ACCEPT

# obrir el localhost
iptables -A INPUT -i lo -j ACCEPT
iptables -A OUTPUT -o lo -j ACCEPT

# obrir la nostra ip
iptables -A INPUT -s 10.200.243.205 -j ACCEPT
iptables -A OUTPUT -d 10.200.243.205 -j ACCEPT

iptables -A INPUT -s 172.100.205.1 -j ACCEPT
iptables -A OUTPUT -d 172.100.205.1 -j ACCEPT

#nat
iptables -A FORWARD -s 172.100.205.0/24 -d 0.0.0.0/0 -j ACCEPT
iptables -A FORWARD -s 0.0.0.0/0 -d 172.100.205.0/24 -j ACCEPT

iptables -t nat -A POSTROUTING -s 172.100.205.0/24 -j MASQUERADE

#el port 2022 del router s'ha configurat per permetre l'accés al servei SSH del host1
#rol de servidor
iptables -A FORWARD -p tcp --dport 22 -d 172.100.205.2 -j ACCEPT
iptables -A FORWARD -p tcp --sport 22 -s 172.100.205.2 -m state --state RELATED,ESTABLISHED -j ACCEPT

iptables -t nat -A PREROUTING -p tcp --dport 2022 -j DNAT --to 172.100.205.2:22

#el router no respon pings
iptables -A INPUT -p icmp --icmp-type 8 -j DROP
iptables -A OUTPUT -p icmp --icmp-type 0 -j DROP
```