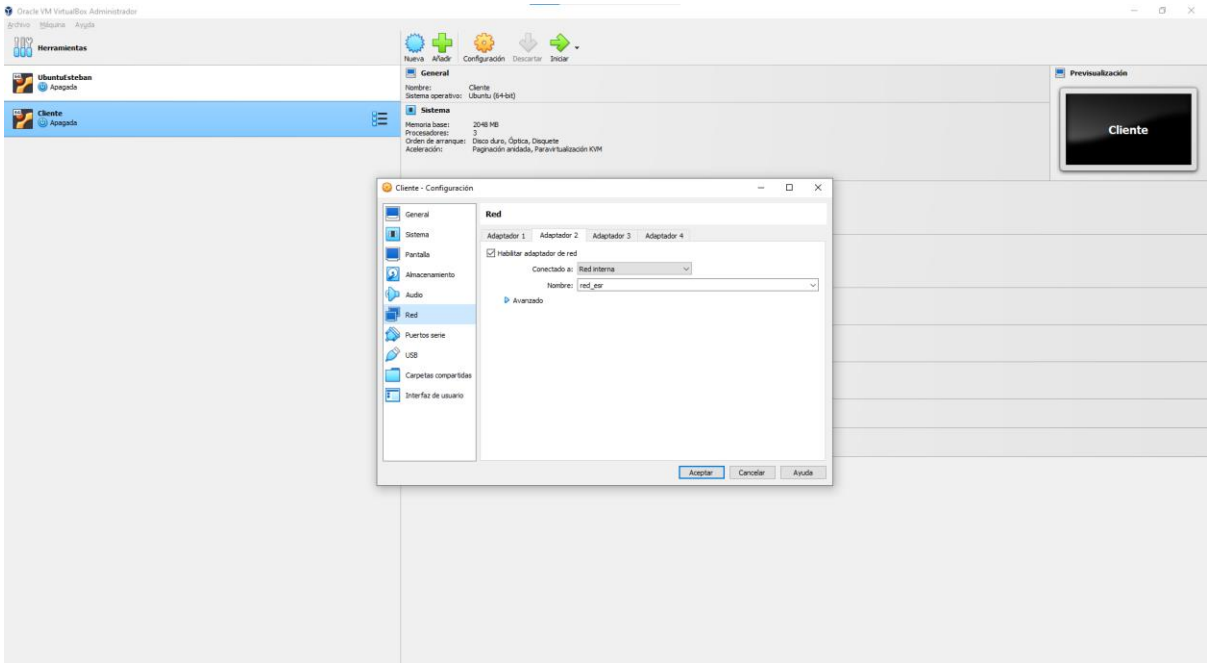
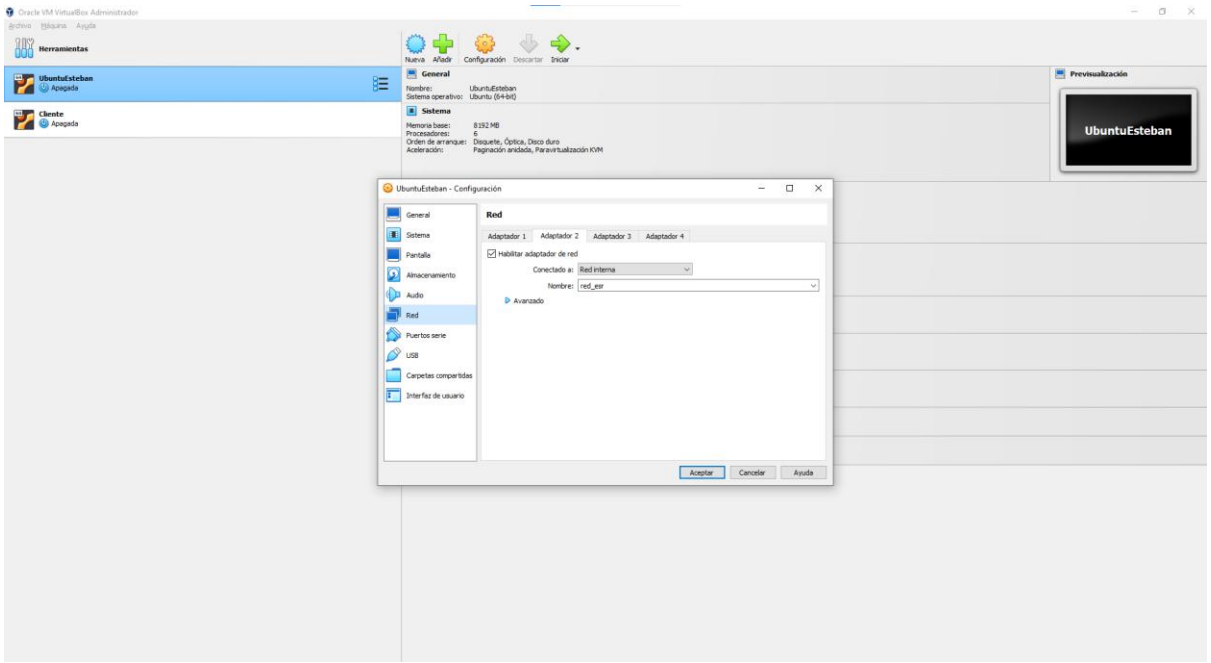
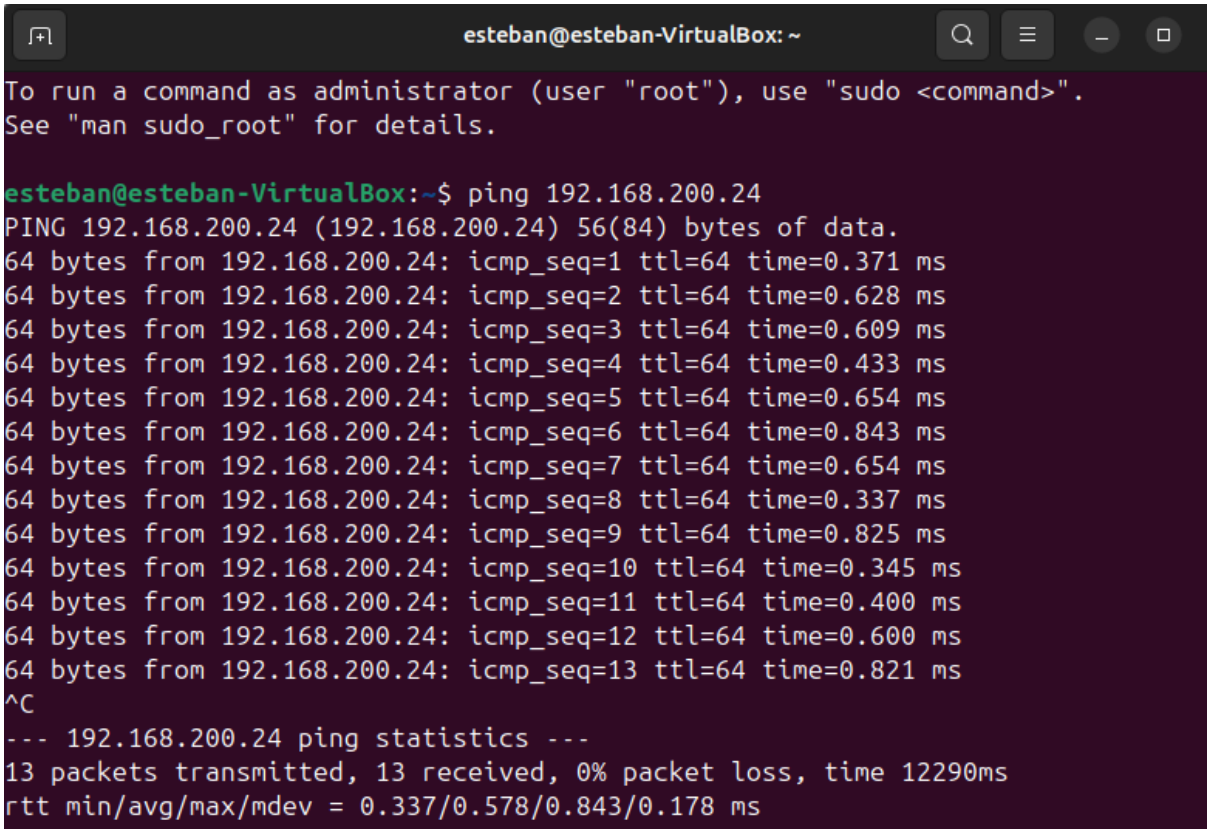
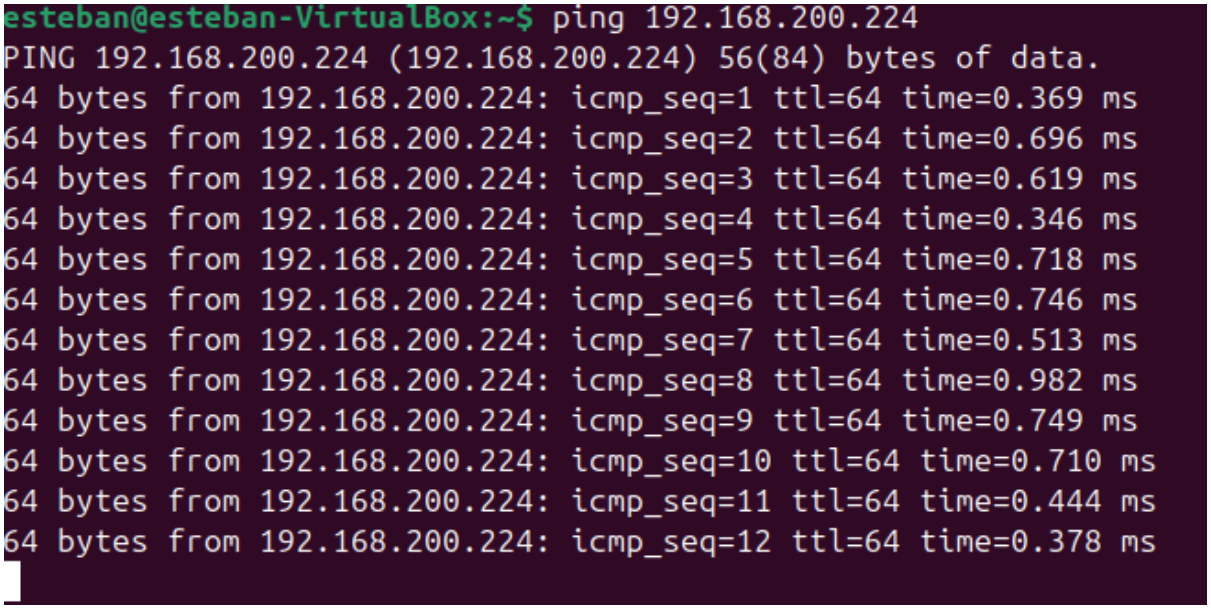
ef





Configuración del servidor

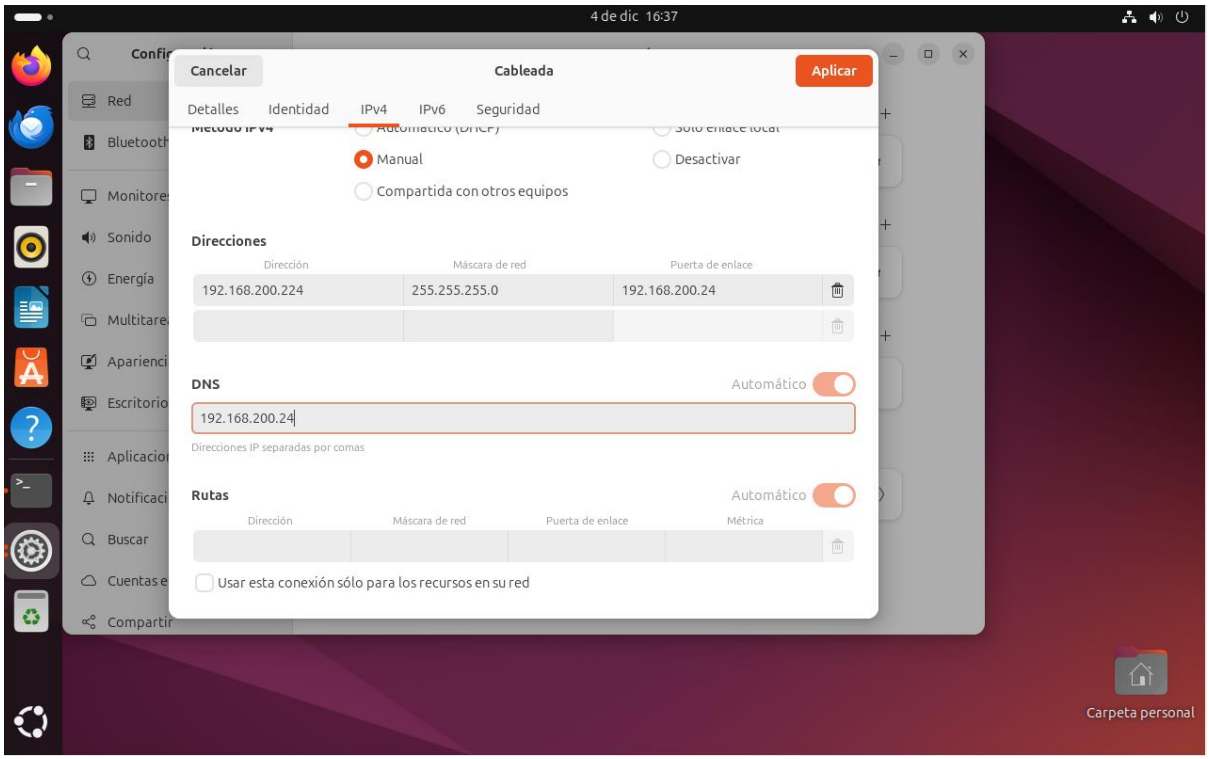




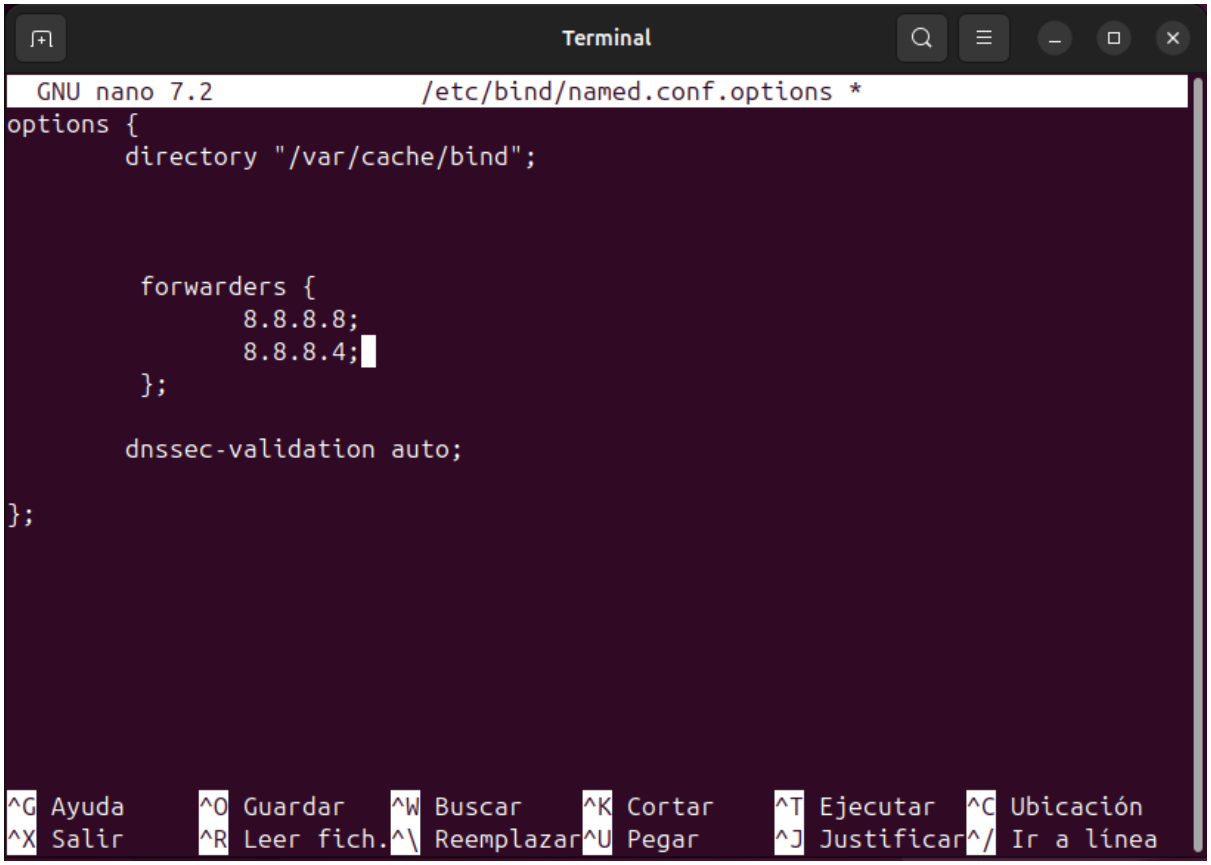
Instalar bind9

```
esteban@esteban-VirtualBox:~$ sudo apt update
sudo apt install bind9
[sudo] contraseña para oscar:
Obj:1 http://archive.ubuntu.com/ubuntu noble InRelease
```

```
  GNU nano 7.2                 /etc/bind/named.conf.options
options {
        directory "/var/cache/bind";



        // forwarders {
        //      0.0.0.0;
        // };

        dnssec-validation auto;

};
```



```
esteban@esteban-VirtualBox:~$ sudo ufw allow 53/udp
Reglas actualizadas
Reglas actualizadas (v6)
esteban@esteban-VirtualBox:~$ sudo ufw enable
El cortafuegos está activo y habilitado en el arranque del sistema
esteban@esteban-VirtualBox:~$ sudo ufw reload
El cortafuegos se ha recargado
```



```
 GNU nano 7.2                 /etc/bind/named.conf.options
options {
        directory "/var/cache/bind";

        allow-query { 192.168.200.224;
                      127.0.0.1; };

         forwarders {
                8.8.8.8;
                8.8.4.4;
         };

        dnssec-validation auto;

};




                            [ 14 líneas escritas ]
^G Ayuda      ^O Guardar    ^W Buscar     ^K Cortar     ^T Ejecutar   ^C Ubicación
^X Salir      ^R Leer fich. ^\ Reemplazar ^U Pegar      ^J Justificar ^/ Ir a línea
```

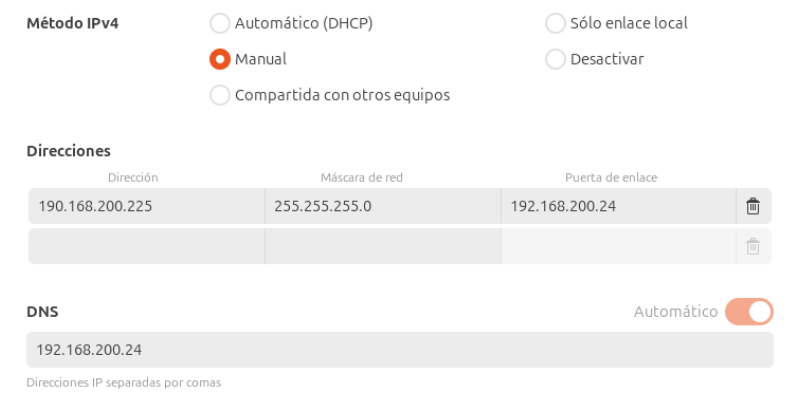
Parte 3

```
esteban@esteban-VirtualBox:~$ nslookup www.google.com
Server:         127.0.0.53
Address:        127.0.0.53#53

Non-authoritative answer:
Name:   www.google.com
Address: 142.250.200.132
Name:   www.google.com
Address: 2a00:1450:4003:803::2004
```

```
esteban@esteban-VirtualBox:~$ dig www.redes.com

; <<>> DiG 9.18.39-0ubuntu0.24.04.2-Ubuntu <<>> www.redes.com
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 47338
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 65494
;; QUESTION SECTION:
;www.redes.com.                 IN      A

;; ANSWER SECTION:
www.redes.com.          3600    IN      A       51.38.65.44

;; Query time: 59 msec
;; SERVER: 127.0.0.53#53(127.0.0.53) (UDP)
;; WHEN: Thu Dec 04 17:23:18 CET 2025
;; MSG SIZE  rcvd: 58

esteban@esteban-VirtualBox:~$ dig www.redes.com

; <<>> DiG 9.18.39-0ubuntu0.24.04.2-Ubuntu <<>> www.redes.com
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 64822
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:; udp: 65494
;; QUESTION SECTION:
;www.redes.com.                 IN      A

;; ANSWER SECTION:
www.redes.com.          3595    IN      A       51.38.65.44

;; Query time: 3 msec
;; SERVER: 127.0.0.53#53(127.0.0.53) (UDP)
;; WHEN: Thu Dec 04 17:23:23 CET 2025
;; MSG SIZE  rcvd: 58
```

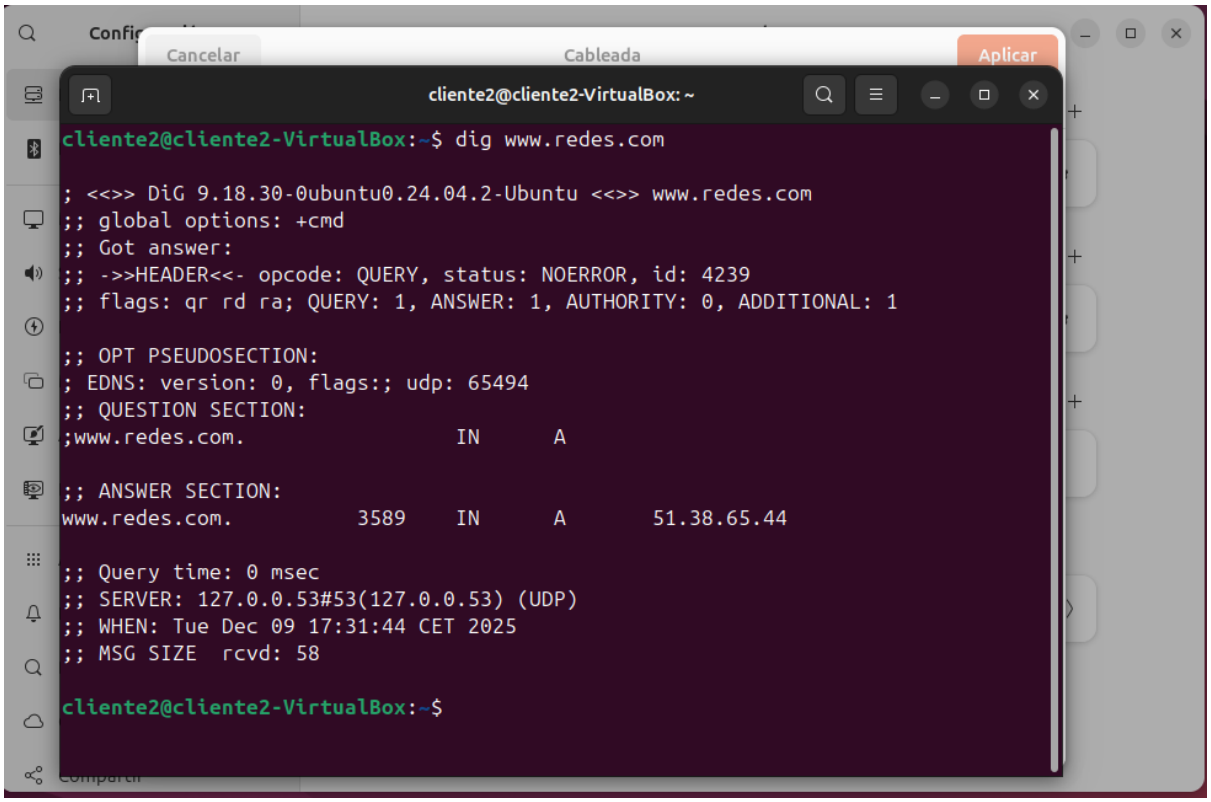
2 cliente

Creamos el 2 cliente y configuramos su ip dns...



Añadimos al name.conf.options del servidor la ip del nuevo cliente

```
options {
        directory "/var/cache/bind";

        allow-query { 192.168.200.224;
                      192.168.200.225;
                      127.0.0.1; };

         forwarders {
                8.8.8.8;
                8.8.4.4;
         };

        dnssec-validation auto;

};
```



volvemos a ejecutar el dig y nos damos cuenta de que solo ha tardado 0 segundos

```
esteban@esteban-VirtualBox:~$ sudo rndc querylog
esteban@esteban-VirtualBox:~$ sudo tail -f /var/log/syslog
2025-12-09T18:10:16.307756+01:00 esteban-VirtualBox systemd[1]: Finished sysstat-collect.service - system activity accounting tool.
2025-12-09T18:11:34.052764+01:00 esteban-VirtualBox kernel: [UFW BLOCK] IN=enp0s8 OUT= MAC=08:00:27:57:9a:21:08:00:27:94:2b:41:08:00 SRC=190.168.200.225 DST=192.168.200.24 LEN=64 TOS=0
x00 PREC=0x00 TTL=64 ID=40681 DF PROTO=TCP SPT=57914 DPT=53 WINDOW=64240 RES=0x00 SYN URGP=0
2025-12-09T18:11:35.094262+01:00 esteban-VirtualBox kernel: [UFW BLOCK] IN=enp0s8 OUT= MAC=08:00:27:57:9a:21:08:00:27:94:2b:41:08:00 SRC=190.168.200.225 DST=192.168.200.24 LEN=60 TOS=0
x00 PREC=0x00 TTL=64 ID=40682 DF PROTO=TCP SPT=57914 DPT=53 WINDOW=64240 RES=0x00 SYN URGP=0
2025-12-09T18:11:36.071979+01:00 esteban-VirtualBox kernel: [UFW BLOCK] IN=enp0s8 OUT= MAC=08:00:27:57:9a:21:08:00:27:94:2b:41:08:00 SRC=190.168.200.225 DST=192.168.200.24 LEN=60 TOS=0
x00 PREC=0x00 TTL=64 ID=40683 DF PROTO=TCP SPT=57914 DPT=53 WINDOW=64240 RES=0x00 SYN URGP=0
2025-12-09T18:11:37.092868+01:00 esteban-VirtualBox kernel: [UFW BLOCK] IN=enp0s8 OUT= MAC=08:00:27:57:9a:21:08:00:27:94:2b:41:08:00 SRC=190.168.200.225 DST=192.168.200.24 LEN=60 TOS=0
x00 PREC=0x00 TTL=64 ID=40684 DF PROTO=TCP SPT=57914 DPT=53 WINDOW=64240 RES=0x00 SYN URGP=0
2025-12-09T18:11:38.118391+01:00 esteban-VirtualBox kernel: [UFW BLOCK] IN=enp0s8 OUT= MAC=08:00:27:57:9a:21:08:00:27:94:2b:41:08:00 SRC=190.168.200.225 DST=192.168.200.24 LEN=60 TOS=0
x00 PREC=0x00 TTL=64 ID=40685 DF PROTO=TCP SPT=57914 DPT=53 WINDOW=64240 RES=0x00 SYN URGP=0
2025-12-09T18:11:39.142066+01:00 esteban-VirtualBox kernel: [UFW BLOCK] IN=enp0s8 OUT= MAC=08:00:27:57:9a:21:08:00:27:94:2b:41:08:00 SRC=190.168.200.225 DST=192.168.200.24 LEN=60 TOS=0
x00 PREC=0x00 TTL=64 ID=40686 DF PROTO=TCP SPT=57914 DPT=53 WINDOW=64240 RES=0x00 SYN URGP=0
2025-12-09T18:11:55.531746+01:00 esteban-VirtualBox kernel: [UFW BLOCK] IN=enp0s8 OUT= MAC=08:00:27:57:9a:21:08:00:27:94:2b:41:08:00 SRC=190.168.200.225 DST=192.168.200.24 LEN=60 TOS=0
x00 PREC=0x00 TTL=64 ID=4121 DF PROTO=TCP SPT=39388 DPT=53 WINDOW=64240 RES=0x00 SYN URGP=0
2025-12-09T18:12:10.302453+01:00 esteban-VirtualBox named[1298]: received control channel command 'querylog'
2025-12-09T18:12:10.302993+01:00 esteban-VirtualBox named[1298]: query logging is now on
2025-12-09T18:12:29.402712+01:00 esteban-VirtualBox kernel: [UFW BLOCK] IN=enp0s8 OUT= MAC=08:00:27:57:9a:21:08:00:27:94:2b:41:08:00 SRC=190.168.200.225 DST=192.168.200.24 LEN=64 TOS=0
x00 PREC=0x00 TTL=64 ID=64968 DF PROTO=TCP SPT=49452 DPT=53 WINDOW=64240 RES=0x00 SYN URGP=0
2025-12-09T18:12:30.317148+01:00 esteban-VirtualBox named[1298]: client @0x76fac534f178 192.168.200.224#55915 (connectivity-check.ubuntu.com): query: connectivity-check.ubuntu.com IN A
 +E(0) (192.168.200.24)
2025-12-09T18:12:31.814078+01:00 esteban-VirtualBox named[1298]: client @0x76fac534f178 192.168.200.224#56698 (api.snapcraft.io): query: api.snapcraft.io IN A +E(0) (192.168.200.24)
2025-12-09T18:12:31.814582+01:00 esteban-VirtualBox named[1298]: client @0x76fac537cfc8 192.168.200.224#37137 (api.snapcraft.io): query: api.snapcraft.io IN AAAA +E(0) (192.168.200.24)
2025-12-09T18:12:32.713879+01:00 esteban-VirtualBox named[1298]: client @0x76fac537cfc8 192.168.200.224#54215 (api.snapcraft.io): query: api.snapcraft.io IN AAAA +E(0) (192.168.200.24)
2025-12-09T18:12:32.713993+01:00 esteban-VirtualBox named[1298]: client @0x76fac537cfc8 192.168.200.224#40375 (api.snapcraft.io): query: api.snapcraft.io IN A +E(0) (192.168.200.24)
2025-12-09T18:12:32.971492+01:00 esteban-VirtualBox named[1298]: client @0x76fac537cfc8 192.168.200.224#38890 (canonical-lgw01.cdn.snapcraftcontent.com): query: canonical-lgw01.cdn.sna
pcraftcontent.com IN AAAA +E(0) (192.168.200.24)
2025-12-09T18:12:32.971595+01:00 esteban-VirtualBox named[1298]: client @0x76fac534f178 192.168.200.224#60057 (canonical-lgw01.cdn.snapcraftcontent.com): query: canonical-lgw01.cdn.sna
pcraftcontent.com IN A +E(0) (192.168.200.24)
2025-12-09T18:12:34.513178+01:00 esteban-VirtualBox kernel: [UFW BLOCK] IN=enp0s8 OUT= MAC=08:00:27:57:9a:21:08:00:27:94:2b:41:08:00 SRC=190.168.200.225 DST=192.168.200.24 LEN=60 TOS=0
x00 PREC=0x00 TTL=64 ID=64973 DF PROTO=TCP SPT=49452 DPT=53 WINDOW=64240 RES=0x00 SYN URGP=0
2025-12-09T18:12:35.426888+01:00 esteban-VirtualBox named[1298]: client @0x76fabc03bf88 192.168.200.224#59016 (dashboard.snapcraft.io): query: dashboard.snapcraft.io IN AAAA +E(0) (192
.168.200.24)
2025-12-09T18:12:35.427131+01:00 esteban-VirtualBox named[1298]: client @0x76fabc079b98 192.168.200.224#34685 (dashboard.snapcraft.io): query: dashboard.snapcraft.io IN A +E(0) (192.16
8.200.24)
^C
esteban@esteban-VirtualBox:~$
```