



CONFIGURACIONES DNS

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PREPARACIÓN DEL SERVIDOR

EMPEZAMOS....

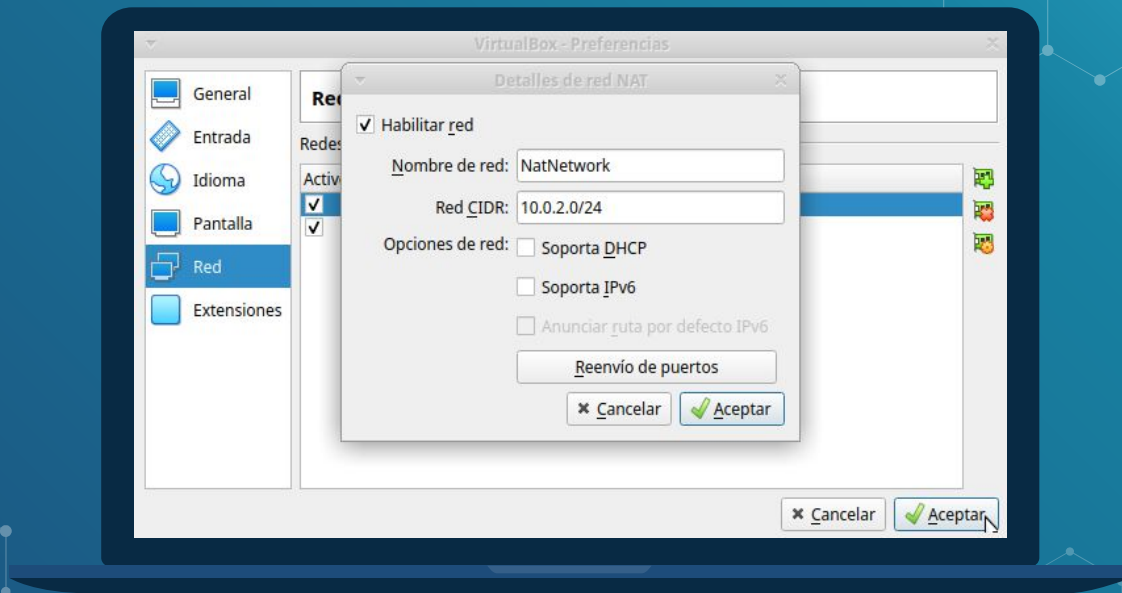


22.04 LTS

Ubuntu



CREACIÓN DE RED NAT



COMPROBACIÓN DE INTERNET

```
javier@javier:~$ ping www.upv.es
PING ias.cc.upv.es (158.42.4.23) 56(84) bytes of data.
^C
--- ias.cc.upv.es ping statistics ---
1 packets transmitted, 0 received, 100% packet loss, time 0ms
```

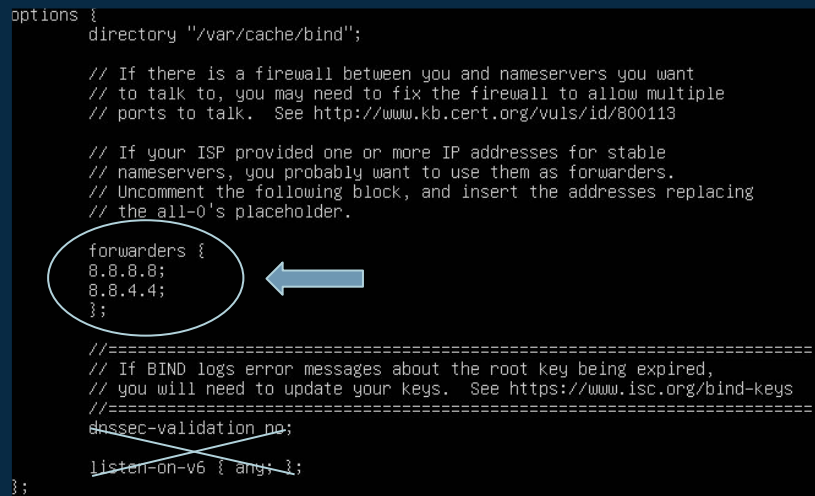
INSTALACIÓN BIND 9

```
root@javier:/home/javier# sudo apt install bind9
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
bind9 ya está en su versión más reciente (1:9.18.1-1ubuntu1.2).
0 actualizados, 0 nuevos se instalarán, 0 para eliminar y 39 no actualizados.
root@javier:/home/javier#
```



2

CONFIGURACIÓN DNS CACHÉ



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

    // If there is a firewall between you and nameservers you want
    // to talk to, you may need to fix the firewall to allow multiple
    // ports to talk.  See http://www.kb.cert.org/vuls/id/800113

    // If your ISP provided one or more IP addresses for stable
    // nameservers, you probably want to use them as forwarders.
    // Uncomment the following block, and insert the addresses replacing
    // the all-0's placeholder.

    forwarders {
        8.8.8.8;
        8.8.4.4;
    };

    //=====
    // If BIND logs error messages about the root key being expired,
    // you will need to update your keys.  See https://www.isc.org/bind-keys
    //=====
    dnssec-validation no;

    listen-on-v6 { any; };
};
```



3

CONFIGURACIÓN PRINCIPAL

```
GNU nano 6.2 /etc/bind/named.conf.local
//
// Do any local configuration here
//
// Consider adding the 1918 zones here, if they are not used in your
// organization
//include "/etc/bind/zones.rfc1918";

zone "laseniaTIC.com" {
    type master;
    file "/etc/bind/db.laseniaTIC.com";
};
```

```
GNU nano 6.2 /etc/bind/db.laseniaTIC.com
;
; BIND data file for local loopback interface
;
$TTL      604800
@         IN      SOA      laseniaTIC.com. root.laseniaTIC.com. (
                                3             ; Serial
                                604800        ; Refresh
                                86400         ; Retry
                                2419200      ; Expire
                                604800 )     ; Negative Cache TTL
;
@         IN      NS       laseniaTIC.com.
@         IN      A        10.0.2.15
dns       IN      A        10.0.2.15
PC04      IN      A        192.168.4.104
www       IN      A        192.42.4.23
senia     IN      CNAME    laseniaTIC.com.
smtp      IN      A        217.13.80.227
laseniaTIC.com. IN      MX   10      smtp.laseniaTIC.com
```

```
javier@javier:~$ dig @10.0.2.15 smtp.laseniaTIC.com

; <<> DiG 9.18.1-1ubuntu1.2-Ubuntu <<> @10.0.2.15 smtp.laseniaTIC.com
; (1 server found)
;; global options: +cmd
;; Got answer:
;; ->HEADER<<- opcode: QUERY, status: NOERROR, id: 61273
;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:: udp: 1232
; COOKIE: c06860183a6d4a2201000000634ec258da6affa137f33896 (good)
;; QUESTION SECTION:
;smtp.laseniaTIC.com.                IN      A

;; ANSWER SECTION:
smtp.laseniaTIC.com.        604800 IN      A      217.13.80.227

;; Query time: 0 msec
;; SERVER: 10.0.2.15#53(10.0.2.15) (UDP)
;; WHEN: Tue Oct 18 15:12:24 UTC 2022
;; MSG SIZE rcvd: 92
```

```
javier@javier:~$ dig @10.0.2.15 PC04.laseniaTIC.com

; <<> DiG 9.18.1-1ubuntu1.2-Ubuntu <<> @10.0.2.15 PC04.laseniaTIC.com
; (1 server found)
;; global options: +cmd
;; Got answer:
;; ->HEADER<<- opcode: QUERY, status: NOERROR, id: 5195
;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:: udp: 1232
; COOKIE: 0a4b4b4873021be101000000634ec0dce1548252ff9b2d55 (good)
;; QUESTION SECTION:
;PC04.laseniaTIC.com.                IN      A

;; ANSWER SECTION:
PC04.laseniaTIC.com.        604800 IN      A      192.168.4.104

;; Query time: 0 msec
;; SERVER: 10.0.2.15#53(10.0.2.15) (UDP)
;; WHEN: Tue Oct 18 15:06:04 UTC 2022
;; MSG SIZE rcvd: 92

javier@javier:~$
```

```
javier@javier:~$ dig @10.0.2.15 dns.laseniaTIC.com

; <<> DiG 9.18.1-1ubuntu1.2-Ubuntu <<> @10.0.2.15 dns.laseniaTIC.com
; (1 server found)
;; global options: +cmd
;; Got answer:
;; ->HEADER<<- opcode: QUERY, status: NOERROR, id: 59052
;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:: udp: 1232
; COOKIE: e7c19364fa020c5801000000634ec065fc0b1bdd0ef65b00 (good)
;; QUESTION SECTION:
;dns.laseniaTIC.com.                IN      A

;; ANSWER SECTION:
dns.laseniaTIC.com.        604800 IN      A      10.0.2.15

;; Query time: 0 msec
;; SERVER: 10.0.2.15#53(10.0.2.15) (UDP)
;; WHEN: Tue Oct 18 15:04:05 UTC 2022
;; MSG SIZE rcvd: 91

javier@javier:~$ _
```

```
javier@javier:~$ dig @10.0.2.15 www.laseniaTIC.com

; <<> DiG 9.18.1-1ubuntu1.2-Ubuntu <<> @10.0.2.15 www.laseniaTIC.com
; (1 server found)
;; global options: +cmd
;; Got answer:
;; ->HEADER<<- opcode: QUERY, status: NOERROR, id: 1640
;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

;; OPT PSEUDOSECTION:
; EDNS: version: 0, flags:: udp: 1232
; COOKIE: 113e2845b7e0600301000000634ec113b0351f687ce5c5f1 (good)
;; QUESTION SECTION:
;www.laseniaTIC.com.                IN      A

;; ANSWER SECTION:
www.laseniaTIC.com.        604800 IN      A      192.42.4.23

;; Query time: 4 msec
;; SERVER: 10.0.2.15#53(10.0.2.15) (UDP)
;; WHEN: Tue Oct 18 15:06:59 UTC 2022
;; MSG SIZE rcvd: 91

javier@javier:~$
```



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CONFIGURACIÓN SECUNDARIA

DNS SLAVE (ESCLAVO)

```
GNU nano 6.2 /etc/bind/named.conf.local
//
// Do any local configuration here
//

// Consider adding the 1918 zones here, if they are not used in your
// organization
//include "/etc/bind/zones.rfc1918";

zone "laseniaTIC.com" {
    type slave;
    file "/etc/bind/db.laseniaTIC.com";
    master { 10.0.2.15; };
    allow-query { any; };
};
```

DNS SLAVE (ESCLAVO)

```
bind9.service - BIND Domain Name Server
  Loaded: loaded (/lib/systemd/system/bind9.service; enabled; vendor preset: enabled)
  Drop-In: /run/systemd/generator/bind9.service.d
           └─50-insserv.conf-$named.conf
  Active: active (running)
    Docs: man:named(8)
  Main PID: 1118 (named)
    Tasks: 4
  Memory: 12.5M
    CPU: 120ms
  CGroup: /system.slice/bind9.service
           └─1118 /usr/sbin/named -f -u bind
```


FIN

