

Configuració DNS

Instal·lar bind:

- `sudo apt install bind9 bind9utils`

LOGS:

Entrar als logs:

- `sudo tail -f /var/log/syslog | grep -i named`

Reset dels logs:

- `service bind9 restart`

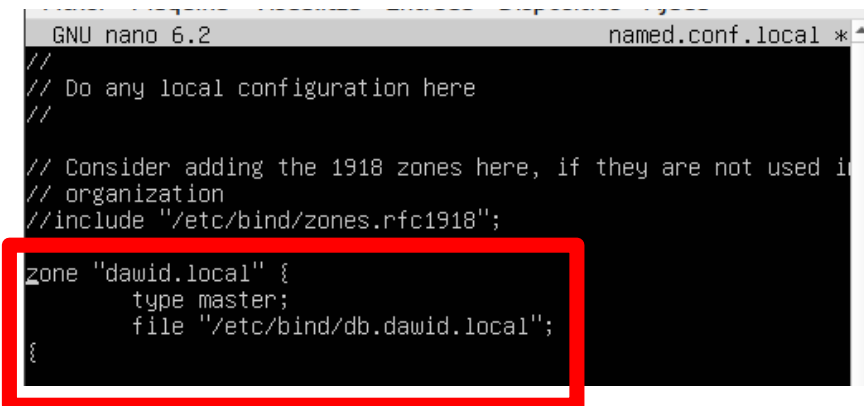
Entrar el directori bind:

- `cd /etc/bind`

Per configurar les zones entrem a:

- `sudo nano named.conf.local`

i escrivim →




```
GNU nano 6.2                                named.conf.local *  
//  
// Do any local configuration here  
//  
// Consider adding the 1918 zones here, if they are not used in  
// organization  
//include "/etc/bind/zones.rfc1918";  
  
zone "dawid.local" {  
    type master;  
    file "/etc/bind/db.dawid.local";  
}
```

Després fem un copia: (el local es un dels DNS, pot ser també: .cat, .com, .gov, etc...)

- `cp db.local db.nom.local`

I entrem el arxiu copiat:

- `sudo nano db.nom.local`



```
GNU nano 6.2                                db.dawid.local  
; BIND data file for local loopback interface  
;  
$TTL      604800  
@         IN      SOA      dawid.local. root.dawid.local. (  
                                2          ; Serial  
                                604800     ; Refresh  
                                86400      ; Retry  
                                2419200    ; Expire  
                                604800 )   ; Negative Cache TTL  
;  
@         IN      NS       ns.dawid.local.  
@         IN      A        172.16.206.177  
ns.dawid.local. IN      A        172.16.206.177  
ftp       IN      A        8.7.6.5  
www       IN      CNAME     ns  
u2        IN      CNAME     ftp  
vpn       IN      A        7.6.5.4  
@         IN      MX       1      mail.dawid.local.  
mail.dawid.local. IN      A        8.8.8.8
```

Verificació

Verificació de la configuració local:

- named-checkconf /etc/bind/named.conf.local (si no diu res, és que està bé).

Verificació de la zona:

- named-checkzone prova.com /etc/bind/db.prova.com

NSLOOKUP

```
dawid@dawid:/etc/bind$ nslookup ns.casa.es localhost
Server:      localhost
Address:     127.0.0.1#53

Name:   ns.casa.es
Address: 192.168.1.135

dawid@dawid:/etc/bind$ nslookup mail.casa.es localhost
Server:      localhost
Address:     127.0.0.1#53

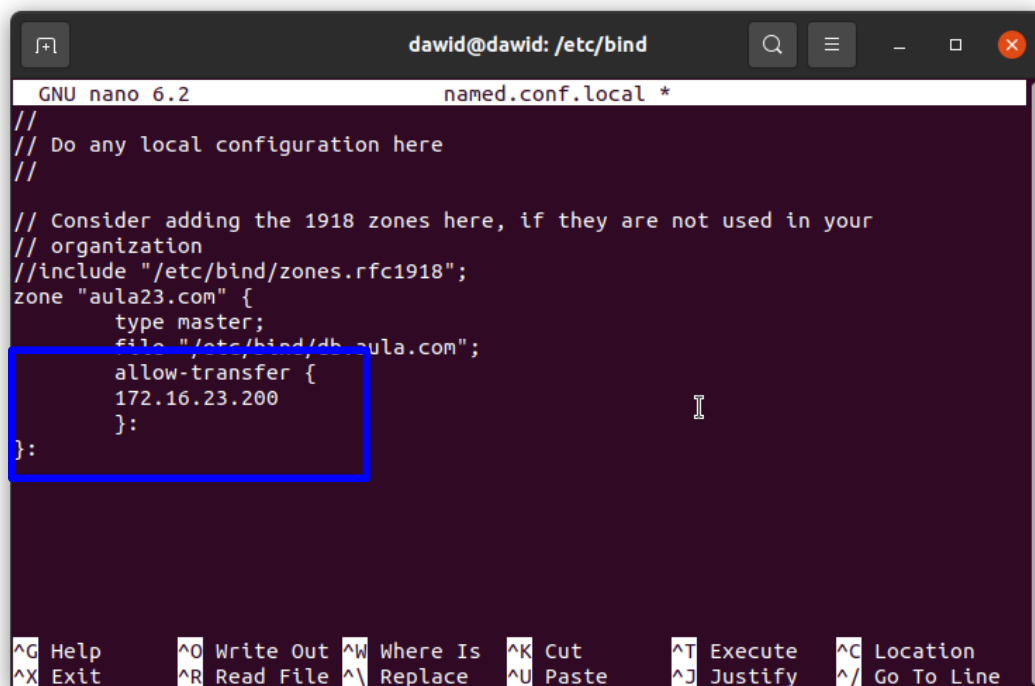
mail.casa.es canonical name = ns.casa.es.
Name:   ns.casa.es
Address: 192.168.1.135

dawid@dawid:/etc/bind$ nslookup www.casa.es localhost
Server:      localhost
Address:     127.0.0.1#53

Name:   www.casa.es
Address: 2.2.2.2
```

Configuració del servidor secundari (slave)

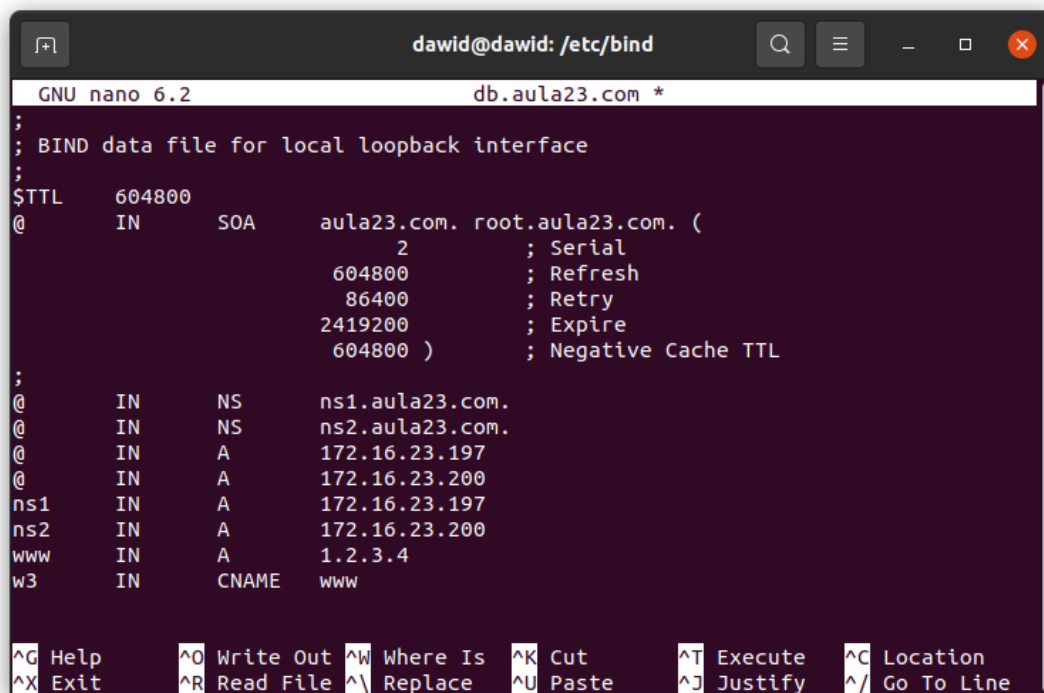
Primer en la primera màquina o màquina master escrivim:



The screenshot shows a terminal window titled 'dawid@dawid: /etc/bind'. The nano editor is open to the file 'named.conf.local'. The configuration for the 'aula23.com' zone is shown, with the 'allow-transfer' block highlighted by a blue rectangle. The configuration includes a master server at 172.16.23.200.

```
GNU nano 6.2 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 "aula23.com" {
    type master;
    file "/etc/bind/db.aula.com";
    allow-transfer {
        172.16.23.200
    };
};
```

Editem l'arxiu (db.nom.local):



The screenshot shows a terminal window titled 'dawid@dawid: /etc/bind'. The nano editor is open to the file 'db.aula23.com'. The configuration includes a BIND data file for the local loopback interface, with various DNS records for the 'aula23.com' domain.

```
GNU nano 6.2 db.aula23.com *
;
; BIND data file for local loopback interface
;
$TTL      604800
@         IN      SOA      aula23.com. root.aula23.com. (
                                2           ; Serial
                                604800      ; Refresh
                                86400       ; Retry
                                2419200    ; Expire
                                604800 )   ; Negative Cache TTL
;
@         IN      NS       ns1.aula23.com.
@         IN      NS       ns2.aula23.com.
@         IN      A        172.16.23.197
@         IN      A        172.16.23.200
ns1       IN      A        172.16.23.197
ns2       IN      A        172.16.23.200
www       IN      A        1.2.3.4
w3        IN      CNAME    www
```

I en la segona màquina instal·lem el bind9 i entrem al «/etc/bind/named.conf.local»

```
GNU nano 6.2 named.conf.local *
// La Màquina Virtual ha informat que el sistema client suporta integració del punter. Això sig
// 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 "casa.es"{
    type slave;
    file "db.casa.es";
    masters {
        192.168.1.135;
    };
};_
```

Resolució inversa:

Entrem al «/etc/bind/named.conf.local» .

```
GNU nano 6.2 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 "casa.es"{
    type master;
    file "/etc/bind/db.casa.es";
    allow-transfer {
        192.168.1.140;
    };
};

zone "1.168.192.in-addr.arpa" {
    type master;
    file "/etc/bind/db.1.168.192";
};
```

Copies des del arxiu db.127 o db.0 o db.255.

```
dawid@dawid:/etc/bind$ sudo cp db.127 db1.168.192
```

Entrem al arxiu que hem creat.

Si no se entiendes lo que hemos hecho al carajo i los buscas en google →

<https://blog.ichasco.com/servidor-dns-maser-slave-bind9/>

```
GNU nano 6.2 db1.168.192 *
;
; BIND reverse data file for local loopback interface
;
$TTL      604800
@         IN      SOA      casa.es. root.casa.es. (
                        1      ; Serial
                        604800 ; Refresh
                        86400  ; Retry
                        2419200 ; Expire
                        604800 ) ; Negative Cache TTL
;
@         IN      NS       ns1.casa.es.
@         IN      NS       ns2.casa.es.
135      IN      PTR      ns1.casa.es.
140      IN      PTR      ns2.casa.es.
```

```
GNU nano 6.2                                     db.28.172
;
; BIND reverse data file for local loopback interface
;
$TTL      604800
@         IN      SOA      aula206.local. aula206.local. (
                                1          ; Serial
                                604800     ; Refresh
                                86400      ; Retry
                                2419200    ; Expire
                                604800 )   ; Negative Cache TTL
;
@         IN      NS       ns1.aula206.local.
1.0       IN      PTR      ns1.aula206.local.
@         IN      NS       ns2.aula206.local
www       IN      A        172.28.0.20
@         IN      MX       1      mail.aula206.local.
mail.aula206.local. IN      A        172.28.0.10
```

Verificació amb el nslookup

```
dawid@dawid:/etc/bind$ nslookup -type=ns 192.168.1.135
Server:         127.0.0.53
Address:        127.0.0.53#53

135.1.168.192.in-addr.arpa    name = dawid.
135.1.168.192.in-addr.arpa    name = dawid.local.

dawid@dawid:/etc/bind$ nslookup -type=ns 192.168.1.140
Server:         127.0.0.53
Address:        127.0.0.53#53

140.1.168.192.in-addr.arpa    name = dawid.
140.1.168.192.in-addr.arpa    name = dawid.local.
```

Forward

Entrem al «/etc/bind/named.conf.option»

```
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.
    recursion yes;

    forwarders {
        192.168.1.135; //primerservidor
        192.168.1.140; //servidorsecundario
    };

    //=====
    // 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-enable yes;
    dnssec-validation yes;

    forward only;

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

Verificacion con nslookup: (esto no lo entiendo)

```
dawid@dawid:/etc/bind$ nslookup 192.168.1.135
135.1.168.192.in-addr.arpa    name = dawid.
135.1.168.192.in-addr.arpa    name = dawid.local.

dawid@dawid:/etc/bind$ nslookup 8.8.8.8
8.8.8.8.in-addr.arpa    name = dns.google.

Authoritative answers can be found from:
```