

DNS sobre Docker con Bind9

Creamos una red en Docker

```
docker network create --subnet=172.16.0.0/16 net_dns  
docker network inspect net_dns
```

Por si necesitamos añadir un contenedor a nuestra red Docker

```
docker network connect net_dns 0aec
```

Creamos un contenedor en Docker

```
docker run -it --name ServidorDNS --net=net_dns --ip=172.16.0.2  
ubuntu:24.04 /bin/bash
```

Instalamos BIND9

```
apt update  
apt-get install bind9 bind9utils
```

Instalamos Nano

```
apt update  
apt-get install nano
```

Verificamos estatus de BIND9

```
/etc/init.d/named status  
nano /etc/bind/named.conf.options
```

```
Seleccinar root@06eb114a659b: /
GNU nano 7.2 /etc/bind/named.conf.options
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 {
        4.4.4.4;
        8.8.8.8;
    };

    //=====
    // 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 auto;

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

```
nano /etc/resolv.conf
```

```
root@06eb114a659b: /
GNU nano 7.2
nameserver 127.0.0.1
options ndots:0
```

```
nano /etc/bind/named.conf.local
```

```
zone "mynet.net" {
    type master;
    file "/etc/bind/zones/db.mynet.net";
};
```

```
mkdir /etc/bind/zones
```

```
nano /etc/bind/zones/db.mynet.net
```

\$TTL 2d

```
@      IN      SOA      ns1.mynet.net. root.mynet.net. (  
                                20230218          ; serial number  
                                3600              ; refresh period  
                                600              ; retry period  
                                604800           ; expire time  
                                1800            ; negative TTL  
                                )  
      IN      NS      ns1.mynet.net.
```

```
ns1.mynet.net.      IN      A      172.16.0.2  
server1.mynet.net.  IN      A      172.16.0.3  
server2.mynet.net.  IN      A      172.16.0.4
```

```
service named start
```

```
service named status
```

Creamos los dos servidores

```
docker run -it --name=server1 --net=net_dns --  
ip=172.16.0.3 --dns=172.16.0.2 httpd:2.4 /bin/bash
```

```
docker run -it --name=server2 --net=net_dns --  
ip=172.16.0.4 --dns=172.16.0.2 httpd:2.4 /bin/bash
```

Verificamos que tenemos 3 contenedores en nuestra red Docker

```
docker network inspect net net_dns
```

En el server2... instalamos el paquete iputils

```
apt update
```

```
apt-get install iputils-ping
```