

Práctica 3.1: Servidor DNS Maestro sin chroot

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1. Modificación de */etc/bind/named.conf.local*

```
root@ladynightmare-E5-522-4154:/etc/bind# cat /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 "dijkstra.org" {
type master;
file "/etc/bind/dijkstra.db";
};

zone "0.168.192.in-addr.arpa" {
type master;
file "/etc/bind/192.rev";
};
```

2. Archivo de zona de búsqueda directa (.db)

```
root@ladynightmare-E5-522-4154:/etc/bind# cat /etc/bind/dijkstra.db
;
; BIND data file for dijkstra.org
;
@ IN SOA dijkstra.org. root.dijkstra.org.(
1 ; Serial
604800 ; Refresh
86400 ; Retry
2419200 ; Expire
604800) ; Default TTL
@ IN NS dns.dijkstra.org.
@ IN MX 10 mail.dijkstra.org.
pc1 IN A 192.168.0.101
pc2 IN A 192.168.0.102
pc3 IN A 192.168.0.103
pc4 IN A 192.168.0.104
pc5 IN A 192.168.0.105
pc6 IN A 192.168.0.106
pc7 IN A 192.168.0.107
pc8 IN A 192.168.0.108
pc9 IN A 192.168.0.109
pc10 IN A 192.168.0.110
www IN A 192.168.0.111
dns IN A 192.168.0.112
mail IN A 192.168.0.112
```

3. Archivo de zona de búsqueda inversa

```
root@ladynightmare-E5-522-4154:/etc/bind# cat /etc/bind/192.rev
;
; BIND reverse data file for 192.168.0.0
;
@ IN SOA dijkstra.org. root.dijkstra.org.(
1 ; Serial
604800 ; Refresh
86400 ; Retry
2419200 ; Expire
604800) ; Sefault TTL
@ IN NS dns.dijkstra.org.
101 IN PTR pc1.dijkstra.org.
102 IN PTR pc2.dijkstra.org.
103 IN PTR pc3.dijkstra.org.
104 IN PTR pc4.dijkstra.org.
105 IN PTR pc5.dijkstra.org.
106 IN PTR pc6.dijkstra.org.
107 IN PTR pc7.dijkstra.org.
108 IN PTR pc8.dijkstra.org.
109 IN PTR pc9.dijkstra.org.
110 IN PTR pc10.dijkstra.org.
111 IN PTR www.dijkstra.org.
112 IN PTR dns.dijkstra.org.
112 IN PTR mail.dijkstra.org.
```

4. Configuración de servidor DNS

```
root@ladynightmare-E5-522-4154:/etc/bind# cat /etc/resolv.conf
# Dynamic resolv.conf(5) file for glibc resolver(3) generated by resolvconf(8)
#     DO NOT EDIT THIS FILE BY HAND -- YOUR CHANGES WILL BE OVERWRITTEN
# 127.0.0.53 is the systemd-resolved stub resolver.
# run "systemd-resolve --status" to see details about the actual nameservers.

#nameserver 127.0.0.53
#search wifi.local

nameserver 127.0.0.1
```

5. Uso de la DNS

5.1. Inicialización de la DNS

```
root@ladynightmare-E5-522-4154:~# /etc/init.d/bind9 start
[ ok ] Starting bind9 (via systemctl): bind9.service.
```

5.2. Comprobación del estado de la DNS

```
root@ladynightmare-E5-522-4154:~# /etc/init.d/bind9 status
● bind9.service - BIND Domain Name Server
   Loaded: loaded (/lib/systemd/system/bind9.service; enabled; vendor preset: en
   Active: active (running) since Sat 2018-11-10 19:42:30 CET; 3h 47min ago
     Docs: man:named(8)
    Main PID: 25918 (named)
      Tasks: 7 (limit: 4915)
     CGroup: /system.slice/bind9.service
            └─25918 /usr/sbin/named -f -u bind

nov 10 23:26:25 ladynightmare-E5-522-4154 named[25918]: network unreachable r...53
nov 10 23:26:25 ladynightmare-E5-522-4154 named[25918]: network unreachable r...53
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nov 10 23:26:25 ladynightmare-E5-522-4154 named[25918]: network unreachable r...53
nov 10 23:28:05 ladynightmare-E5-522-4154 named[25918]: network unreachable r...53
Hint: Some lines were ellipsized, use -l to show in full.
```

5.3. Resolución de peticiones

```
root@ladynightmare-E5-522-4154:~# host dijkstra.org
dijkstra.org mail is handled by 10 mail.dijkstra.org.
root@ladynightmare-E5-522-4154:~# host pc7.dijkstra.org
pc7.dijkstra.org has address 192.168.0.107
root@ladynightmare-E5-522-4154:~# host 192.168.0.107
107.0.168.192.in-addr.arpa domain name pointer pc7.dijkstra.org.
```

5.4. Apagado de la DNS

```
root@ladynightmare-E5-522-4154:~# /etc/init.d/bind9 stop
[ ok ] Stopping bind9 (via systemctl): bind9.service.
```

5.5. Comprobación del estado de la DNS

```
root@ladynightmare-E5-522-4154:~# /etc/init.d/bind9 status
● bind9.service - BIND Domain Name Server
   Loaded: loaded (/lib/systemd/system/bind9.service; enabled; vendor preset: en
   Active: inactive (dead) since Sat 2018-11-10 23:32:32 CET; 36s ago
     Docs: man:named(8)
    Process: 31708 ExecStop=/usr/sbin/rndc stop (code=exited, status=0/SUCCESS)
    Process: 25918 ExecStart=/usr/sbin/named -f $OPTIONS (code=exited, status=0/SU
   Main PID: 25918 (code=exited, status=0/SUCCESS)

nov 10 23:32:32 ladynightmare-E5-522-4154 systemd[1]: Stopping BIND Domain Na...
nov 10 23:32:32 ladynightmare-E5-522-4154 named[25918]: received control chan...p'
nov 10 23:32:32 ladynightmare-E5-522-4154 named[25918]: shutting down: flushi...es
nov 10 23:32:32 ladynightmare-E5-522-4154 named[25918]: stopping command chan...53
nov 10 23:32:32 ladynightmare-E5-522-4154 named[25918]: stopping command chan...53
nov 10 23:32:32 ladynightmare-E5-522-4154 named[25918]: no longer listening o...53
nov 10 23:32:32 ladynightmare-E5-522-4154 named[25918]: no longer listening o...53
nov 10 23:32:32 ladynightmare-E5-522-4154 named[25918]: no longer listening o...53
nov 10 23:32:32 ladynightmare-E5-522-4154 named[25918]: exiting
nov 10 23:32:32 ladynightmare-E5-522-4154 systemd[1]: Stopped BIND Domain Nam...r.
Hint: Some lines were ellipsized, use -l to show in full.
```