1. Instalare BIND9
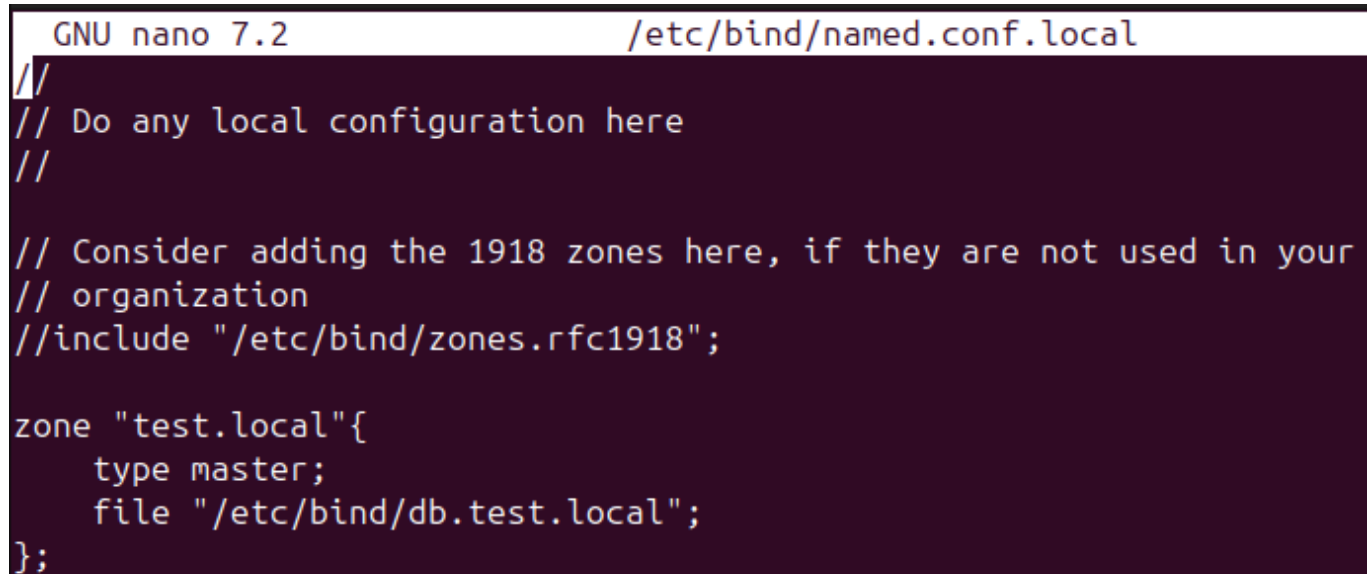
sudo apt update

sudo apt install bind9 bind9utils bind9-doc

2. Configurare zona directa in BIND9

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

```
  GNU nano 7.2                    /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 "test.local"{
    type master;
    file "/etc/bind/db.test.local";
};
```

Adaugat:

zone "test.local" {

   type master;

   file "/etc/bind/db.test.local";

};

3. Creare fisier de zona:

sudo cp /etc/bind/db.local /etc/bind/db.test.local

sudo nano /etc/bind/db.test.loca

```
  GNU nano 7.2                          /etc/bind/db.test.local
;
; BIND data file for local loopback interface
;
$TTL    604800
@       IN      SOA     localhost. root.localhost. (
                              2         ; Serial
                         604800         ; Refresh
                          86400         ; Retry
                        2419200         ; Expire
                         604800 )       ; Negative Cache TTL
;
@       IN      NS      ns.test.local.
ns      IN      A       192.168.0.10
www     IN      A       192.168.0.10
```

4. Verificari si restart BIND9

sudo named-checkzone test.local /etc/bind/db.test.local

sudo systemctl restart bind9

```
robert@robert-VirtualBox:~$ sudo named-checkzone test.local /etc/bind/db.test.local
zone test.local/IN: loaded serial 2
OK
robert@robert-VirtualBox:~$ sudo systemctl status bind9
● named.service - BIND Domain Name Server
     Loaded: loaded (/usr/lib/systemd/system/named.service; enabled; preset: en>
     Active: active (running) since Wed 2025-05-21 16:32:23 EEST; 8min ago
       Docs: man:named(8)
   Main PID: 3856 (named)
     Status: "running"
      Tasks: 8 (limit: 2271)
     Memory: 7.3M (peak: 7.7M)
        CPU: 54ms
     CGroup: /system.slice/named.service
             └─3856 /usr/sbin/named -f -u bind
```

```
robert@robert-VirtualBox:~$ sudo systemctl restart bind9
```

5. Configurare firewall (UFW)

sudo ufw allow 53

sudo ufw reload

sudo ufw status

```
robert@robert-VirtualBox:~$ sudo ufw allow 53
Rule added
Rule added (v6)
robert@robert-VirtualBox:~$ sudo ufw reload
Firewall reloaded
```

```
robert@robert-VirtualBox:~$ sudo ufw status
Status: active

To                         Action      From
--                         ------      ----
22/tcp                     ALLOW       Anywhere
21                         ALLOW       Anywhere
53                         ALLOW       Anywhere
22/tcp (v6)                ALLOW       Anywhere (v6)
21 (v6)                    ALLOW       Anywhere (v6)
53 (v6)                    ALLOW       Anywhere (v6)
```

6. Testare locala pe serverul Ubuntu

dig @127.0.0.1 www.test.local

```
^Crobert@robert-VirtualBox:~$ dig @127.0.0.1 www.test.local

; <<>> DiG 9.18.30-0ubuntu0.24.04.2-Ubuntu <<>> @127.0.0.1 www.test.local
; (1 server found)
;; global options: +cmd
;; Got answer:
;; WARNING: .local is reserved for Multicast DNS
;; You are currently testing what happens when an mDNS query is leaked to DNS
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 51825
;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1
```

7. Configurare client Windows
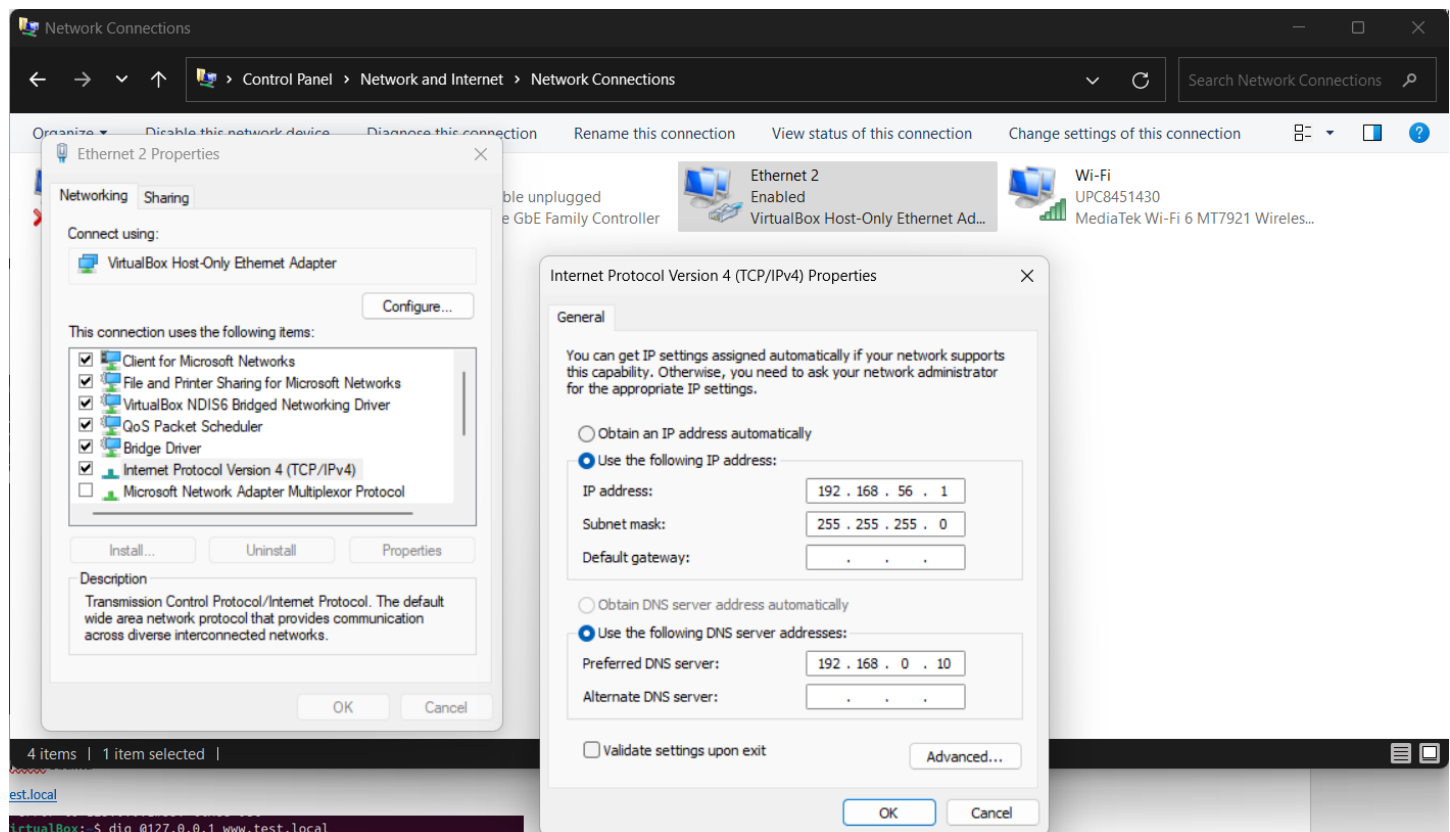
8. Testare de pe client Windows

nslookup www.test.local