

```
virtual-machine:~$ sudo apt install -y bind9 bind9utils bind9-doc dnsutils
```

```
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
bind9 is already the newest version (1:9.18.18-0ubuntu0.22.04.1).
bind9-doc is already the newest version (1:9.18.18-0ubuntu0.22.04.1).
bind9utils is already the newest version (1:9.18.18-0ubuntu0.22.04.1).
dnsutils is already the newest version (1:9.18.18-0ubuntu0.22.04.1).
0 upgraded, 0 newly installed, 0 to remove and 61 not upgraded.
```

```
virtual-machine:~$ systemctl status bind9
```

```
● named.service - BIND Domain Name Server
   Loaded: loaded (/lib/systemd/system/named.service; enabled; vendor preset: enabled)
   Active: active (running) since Sun 2024-02-18 16:35:58 CET; 1min 1s ago
     Docs: man:named(8)
  Process: 913 ExecStart=/usr/sbin/named $OPTIONS (code=exited, status=0/SUCCESS)
 Main PID: 946 (named)
    Tasks: 6 (limit: 4555)
   Memory: 10.6M
      CPU: 109ms
   CGroup: /system.slice/named.service
           └─946 /usr/sbin/named -u bind
```

```
16:35:58 18 فبفرفف Omar-virtual-machine named[946]: network unreachable
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lines 1-16
```



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Activities Text Editor 16:55 18 فيفري

Open × *named.conf.options [Read-Only] Save /etc/bind

```
1 options {
2     directory "/var/cache/bind";
3
4     // If there is a firewall between you and nameservers you want
5     // to talk to, you may need to fix the firewall to allow multiple
6     // ports to talk. See http://www.kb.cert.org/vuls/id/800113
7
8     // If your ISP provided one or more IP addresses for stable
9     // nameservers, you probably want to use them as forwarders.
10    // Uncomment the following block, and insert the addresses
11    replacing // the all-0's placeholder.
12
13    // forwarders {
14    //     0.0.0.0;
15    // };
16
17    //
18    =====
19    // If BIND logs error messages about the root key being expired,
20    // you will need to update your keys. See https://www.isc.org/
21    bind-keys
22    //
23    =====
24    dnssec-validation auto;
25
26    listen-on-v6 { any; };
27    allowed-query {localhost; Lan;};
28    forwarders {
29        1.1.1.1; // use CloudFlare 1.1.1.1 DNS as a forwarder
30    };
31
32    recursion yes; // allow recursive queries
33
34    acl LAN {
35        10.0.2.0/24; // allow only LAN traffic from 10.0.2.15-10.0.2.255
36    };
37
38    allow-query { localhost; LAN; };
39};
```

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```
ERROR: You need to be root to run this script
omar@omar-virtual-machine:~$ sudo ufw allow in from 10.0.2.0/24
Rules updated
omar@omar-virtual-machine:~$ sudo ufw allow in from 10.0.2.0/24 to any port 53
Rules updated
omar@omar-virtual-machine:~$ ufw allow in from 192.168.174.128/24 to any port 53
ERROR: You need to be root to run this script
omar@omar-virtual-machine:~$ sudo ufw allow in from 192.168.174.128/24 to any port 53
WARN: Rule changed after normalization
Rules updated
omar@omar-virtual-machine:~$ systemctl restart named
omar@omar-virtual-machine:~$ systemctl enable named
Unknown command verb enable named.
omar@omar-virtual-machine:~$ systemctl enable named
Synchronizing state of named.service with SysV service script with /lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable named
omar@omar-virtual-machine:~$
```

```
GNU nano 6.2 /etc/named.conf *
Szone "esprit.tn" IN {
    type master;
    file "esprit.tn.db";
    allow-query { any; };
};

[ Read 5 lines ]
^G Help      ^O Write Out  ^W Where Is   ^K Cut        ^T Execute
^X Exit      ^R Read File  ^\ Replace    ^U Paste      ^J Justify
```

```
GNU nano 6.2 /etc/bind/esprit.tn.db
server1 IN A 172.30.1.101
server2 IN A 172.30.1.102
server3 IN A 172.30.1.103

Read 4 lines
^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify   ^_ Go To Line
```

```
GNU nano 6.2 /etc/bind/db.192.168.1 *
$TTL      604800
@          IN      SOA      ns1.esprit.tn. admin.esprit.tn. (
                                2022020201 ; Serial
                                604800 ; Refresh
                                86400 ; Retry
                                2419200 ; Expire
                                604800) ; Negative Cache TTL
;
@          IN      NS       ns1.esprit.tn.
1          IN      PTR      server1.esprit.tn.
2          IN      PTR      server2.esprit.tn.
3          IN      PTR      server3.esprit.tn.

^G Help      ^O Write Out ^W Where Is  ^K Cut       ^T Execute   ^C Location
^X Exit      ^R Read File ^\ Replace   ^U Paste     ^J Justify   ^_ Go To Line
```

Open ↕

esprit.tn.rev
/etc/bind/zones

Save

⋮

—

□

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```
1;
2; BIND reverse data file for local loopback interface
3;
4 $TTL      604800
5; SOA record with MNAME and RNAME updated
6 @        IN      SOA      esprit.tn. root.esprit.tn. (
7          2          ; Serial Note: increment after each change
8          604800      ; Refresh
9          86400       ; Retry
10         2419200     ; Expire
11         604800 )    ; Negative Cache TTL
12; Name server record
13 @        IN      NS       bindserver.esprit.tn.
14; A record for name server
15 bindserver      IN      A          10.0.2.15
16; PTR record for name server
17 2      IN      PTR       bindserver.esprit.tn
18; PTR record for clients
19 3      IN      PTR       client1.esprit.tn
20 4      IN      PTR       client2.esprit
```