

DNS

1-Installation de dns/apache/mysql

```
root@ubuntu:/home/Imane# nano /etc/dhcp/dhcpd.conf
root@ubuntu:/home/Imane# systemctl restart isc-dhcp-server
root@ubuntu:/home/Imane# systemctl status isc-dhcp-server
● isc-dhcp-server.service - ISC DHCP IPv4 server
   Loaded: loaded (/lib/systemd/system/isc-dhcp-server.service; enabled; vendor preset: enabled)
   Active: active (running) since Fri 2025-01-17 15:23:22 +01; 9s ago
     Docs: man:dhcpd(8)
    Main PID: 5694 (dhcpd)
      Tasks: 4 (limit: 2202)
     Memory: 4.4M
    CGroup: /system.slice/isc-dhcp-server.service
            └─5694 dhcpd -user dhcpd -group dhcpd -f -4 -pf /run/dhcp-server/dhcpd.pid -cf /etc/dhcp/dhcpd.conf ens37

Jan 17 15:23:22 ubuntu dhcpd[5694]: Database file: /var/lib/dhcp/dhcpd.leases
Jan 17 15:23:22 ubuntu dhcpd[5694]: PID file: /run/dhcp-server/dhcpd.pid
Jan 17 15:23:22 ubuntu dhcpd[5694]: Wrote 0 leases to leases file.
Jan 17 15:23:22 ubuntu dhcpd[5694]: Listening on LPF/ens37/00:0c:29:f6:97:6b/10.0.0.0/16
Jan 17 15:23:22 ubuntu sh[5694]: Listening on LPF/ens37/00:0c:29:f6:97:6b/10.0.0.0/16
Jan 17 15:23:22 ubuntu dhcpd[5694]: Sending on LPF/ens37/00:0c:29:f6:97:6b/10.0.0.0/16
Jan 17 15:23:22 ubuntu sh[5694]: Sending on LPF/ens37/00:0c:29:f6:97:6b/10.0.0.0/16
Jan 17 15:23:22 ubuntu dhcpd[5694]: Sending on Socket/fallback/fallback-net
Jan 17 15:23:22 ubuntu sh[5694]: Sending on Socket/fallback/fallback-net
Jan 17 15:23:22 ubuntu dhcpd[5694]: Server starting service.
root@ubuntu:/home/Imane#
```

```
Imane@ubuntu:~$ sudo nano /etc/dhcp/dhcpd.conf.
Imane@ubuntu:~$ sudo nano /etc/dhcp/dhcpd.conf
Imane@ubuntu:~$ sudo nano /etc/bind/named.conf.local
Imane@ubuntu:~$ sudo nano /etc/bind/db.pharma.me
Imane@ubuntu:~$ sudo nano /etc/bind/db.10
Imane@ubuntu:~$ sudo named-checkconf
Imane@ubuntu:~$ sudo named-checkzone pharma.me /etc/bind/db.pharma.me
zone pharma.me/IN: loaded serial 2025010601
OK
Imane@ubuntu:~$ sudo named-checkzone 0.0.10.in-addr.arpa /etc/bind/db.10
zone 0.0.10.in-addr.arpa/IN: loaded serial 2025010601
OK
Imane@ubuntu:~$ sudo systemctl restart bind9
Imane@ubuntu:~$ sudo systemctl enable bind9
Failed to enable unit: Refusing to operate on alias name or linked unit file: b
ind9.service
Imane@ubuntu:~$ sudo named-checkconf
Imane@ubuntu:~$ sudo nano /etc/bind/named.conf.local
Imane@ubuntu:~$ sudo systemctl restart bind9
Imane@ubuntu:~$ sudo systemctl enable bind9
Failed to enable unit: Refusing to operate on alias name or linked unit file: b
ind9.service
Imane@ubuntu:~$ sudo named-checkzone pharma.me /etc/bind/db.pharma.me
zone pharma.me/IN: loaded serial 2025010601
OK
Imane@ubuntu:~$ sudo nano /etc/bind/named.conf.local
Imane@ubuntu:~$ sudo nano /etc/bind/db.pharma.me
Imane@ubuntu:~$ sudo systemctl restart bind9
```

```

bind9.service
imane@ubuntu:~$ sudo named-checkzone pharma.me /etc/bind/db.pharma.me
zone pharma.me/IN: loaded serial 2025010601
OK
imane@ubuntu:~$ sudo nano /etc/bind/named.conf.local
imane@ubuntu:~$ sudo nano /etc/bind/db.pharma.me
imane@ubuntu:~$ sudo systemctl restart bind9
imane@ubuntu:~$ sudo systemctl enable bind9
Failed to enable unit: Refusing to operate on alias name or linked unit file: bind9.service
imane@ubuntu:~$ sudo nano /etc/bind/db.pharma.me
imane@ubuntu:~$ sudo systemctl restart bind9
imane@ubuntu:~$ sudo systemctl enable bind9
Failed to enable unit: Refusing to operate on alias name or linked unit file: bind9.service
imane@ubuntu:~$ sudo nano /etc/bind/named.conf.local^C
imane@ubuntu:~$ sudo 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

imane@ubuntu:~$
imane@ubuntu:~$ sudo systemctl status bind9
● named.service - BIND Domain Name Server
   Loaded: loaded (/lib/systemd/system/named.service; enabled; vendor preset: enabled)
   Active: active (running) since Tue 2025-01-21 23:02:35 +01; 3min 25s ago
     Docs: man:named(8)
   Main PID: 13486 (named)

```

```

imane@ubuntu:~$ nslookup www.pharma.me
Server:      10.0.0.1
Address:     10.0.0.1#53

Name:   www.pharma.me
Address: 10.0.0.1

```

```

#
# See man:systemd-resolved.service(8) for details about the
# operation for /etc/resolv.conf.

nameserver 10.0.0.1

```



```

$TTL      86400
@         IN      SOA      ns1.pharma.me. admin.pharma.me. (
                        2025010601 ; Serial (année, mois, jour, numéro de révision)
                        3600        ; Refresh (1 heure)
                        1800        ; Retry (30 minutes)
                        1209600     ; Expire (2 semaines)
                        86400 )     ; Minimum TTL (1 jour)

; Définition des serveurs de noms
@         IN      NS       ns1.pharma.me.
@         IN      NS       ns2.pharma.me.

; Adresses des serveurs de noms
ns1       IN      A        10.0.0.1
ns2       IN      A        10.0.0.2

; Enregistrement des hôtes
www       IN      A        10.0.0.1
mail      IN      A        10.0.0.3
ftp       IN      A        10.0.0.4

; Enregistrements MX pour le mail
@         IN      MX       10 mail.pharma.me.

```

Read 23 lines 1

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(1 server found)
; global options: +cmd
; Got answer:
; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 16595
; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

; OPT PSEUDOSECTION:
EDNS: version: 0, flags:; udp: 1232
COOKIE: d423a4d75d1ba3520100000067901a8de4490f8fe042eaf9 (good)
; QUESTION SECTION:
www.pharma.me.                IN      A

; ANSWER SECTION:
www.pharma.me.                86400   IN      A      10.0.0.1

; Query time: 4 msec
; SERVER: 127.0.0.1#53(localhost) (UDP)
; WHEN: Tue Jan 21 23:07:09 +01 2025
; MSG SIZE rcvd: 86

mane@ubuntu:~$ dig @localhost -x 10.0.0.1

<<>> DiG 9.18.30-0ubuntu0.20.04.1-Ubuntu <<>> @localhost -x 10.0.0.1
(1 server found)
; global options: +cmd
; Got answer:
; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 11243
; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 1

```

```
//
// Définition de la zone principale (directe)
zone "pharma.me" {
    type master;
    file "/etc/bind/db.pharma.me"; // Fichier de zone pour le domaine EIDIA.U
};

// Définition de la zone inverse
zone "0.0.10.in-addr.arpa" {
    type master;
    file "/etc/bind/db.10"; // Fichier de zone inverse pour les IP 192.168.0.
};
// Do any local configuration here
//

// Consider adding the 1918 zones here, if they are not used in your
// organization
//include "/etc/bind/zones.rfc1918";
```

```
lmane@ubuntu:~$ sudo apt update
Hit:1 http://archive.ubuntu.com/ubuntu focal InRelease
Hit:2 http://security.ubuntu.com/ubuntu focal-security InRelease
Get:3 http://archive.ubuntu.com/ubuntu focal-updates InRelease [128 kB]
Hit:4 http://archive.ubuntu.com/ubuntu focal-backports InRelease
Fetched 128 kB in 4s (29.6 kB/s)
Reading package lists... Done
Building dependency tree
Reading state information... Done
All packages are up to date.
lmane@ubuntu:~$ sudo apt install apache2 -y
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following packages were automatically installed and are no longer required:
  linux-headers-5.15.0-126-generic linux-hwe-5.15-headers-5.15.0-126
  linux-image-5.15.0-126-generic linux-modules-5.15.0-126-generic
  linux-modules-extra-5.15.0-126-generic
Use 'sudo apt autoremove' to remove them.
The following additional packages will be installed:
```

```
lmane@ubuntu:~$ sudo systemctl enable apache2
Synchronizing state of apache2.service with SysV service script with /lib/systemd/sd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable apache2
```

```
lmane@ubuntu:~$ sudo systemctl status apache2
● apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Active: active (running) since Tue 2025-01-21 23:32:21 +01; 3min 27s ago
     Docs: https://httpd.apache.org/docs/2.4/
  Main PID: 14866 (apache2)
    Tasks: 55 (limit: 2202)
   Memory: 4.9M
   CGroup: /system.slice/apache2.service
           └─14866 /usr/sbin/apache2 -k start
             └─14868 /usr/sbin/apache2 -k start
               └─14869 /usr/sbin/apache2 -k start

Jan 21 23:32:20 ubuntu systemd[1]: Starting The Apache HTTP Server...
Jan 21 23:32:21 ubuntu apachectl[14865]: AH00558: apache2: Could not reliably determine the server's fully qualified domain name, please see the /etc/httpd/conf/httpd.conf file for instructions on how to set it properly
Jan 21 23:32:21 ubuntu systemd[1]: Started The Apache HTTP Server.
```

```
lmane@ubuntu:~$ sudo systemctl status mysql
● mysql.service - MySQL Community Server
   Loaded: loaded (/lib/systemd/system/mysql.service; enabled; vendor preset: enabled)
   Active: active (running) since Tue 2025-01-21 23:42:17 +01; 37s ago
     Main PID: 16664 (mysqld)
    Status: "Server is operational"
      Tasks: 38 (limit: 2202)
     Memory: 362.7M
    CGroup: /system.slice/mysql.service
            └─16664 /usr/sbin/mysqld

Jan 21 23:42:13 ubuntu systemd[1]: Starting MySQL Community Server...
Jan 21 23:42:17 ubuntu systemd[1]: Started MySQL Community Server.
```