

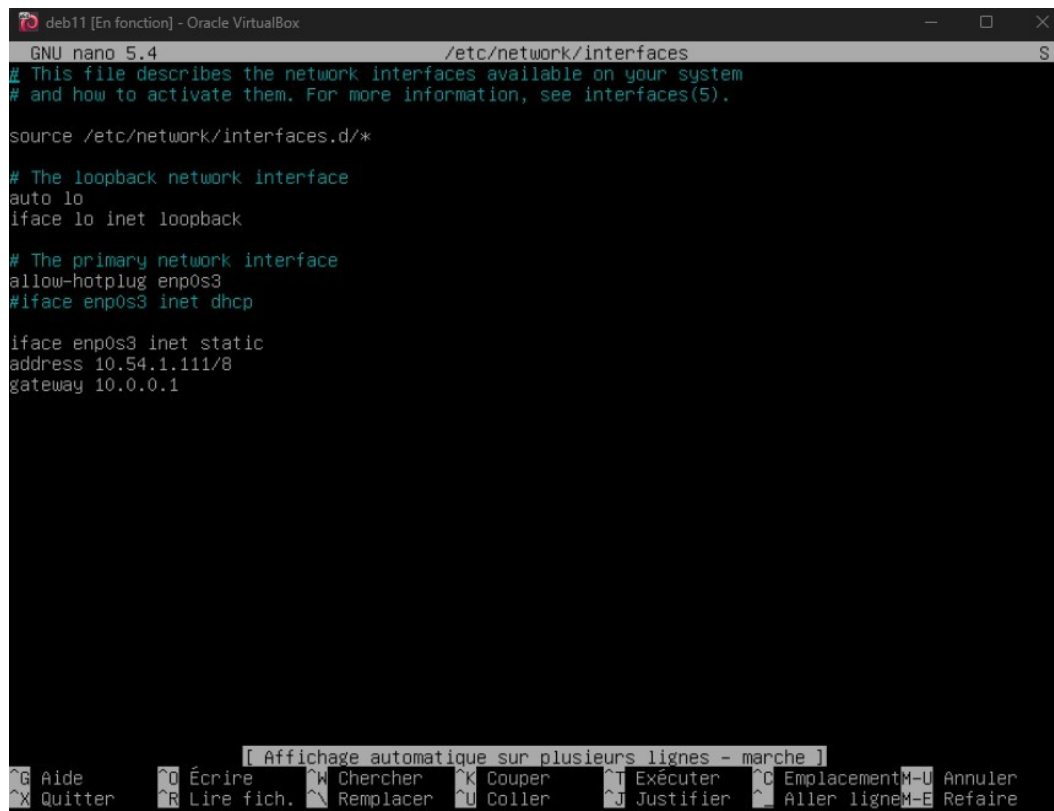
Mise en place d'un serveur Debian 11

Dans le cadre de ma formation BTS SIO option SLAM, j'ai mis en place un serveur Debian 11 sous Oracle VirtualBox. Cette réalisation m'a permis de comprendre le fonctionnement d'un système Linux, de configurer un réseau, d'installer des services essentiels comme Apache2 et SSH, et de vérifier leur bon fonctionnement. Voici les étapes essentielles accompagnées de preuves visuelles.

Vérification de la version du système

```
root@mustapha:~# lsb_release -a
No LSB modules are available.
Distributor ID: Debian
Description:    Debian GNU/Linux 11 (bullseye)
Release:        11
Codename:       bullseye
root@mustapha:~# _
```

Configuration du réseau en IP statique



```
deb11 [En fonction] - Oracle VirtualBox
GNU nano 5.4 /etc/network/interfaces
# This file describes the network interfaces available on your system
# and how to activate them. For more information, see interfaces(5).

source /etc/network/interfaces.d/*

# The loopback network interface
auto lo
iface lo inet loopback

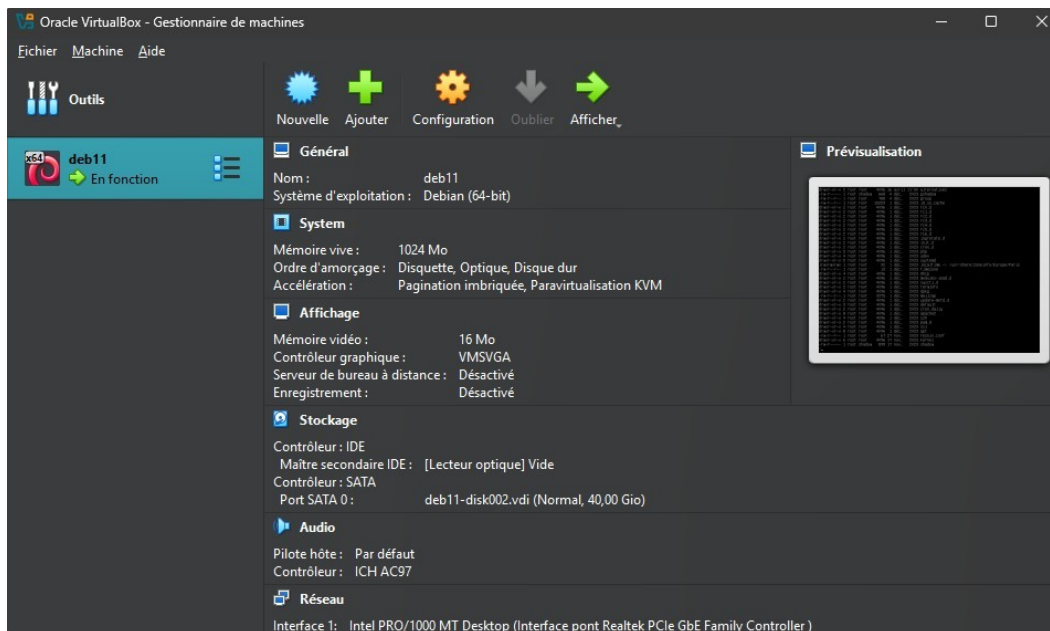
# The primary network interface
allow-hotplug enp0s3
#iface enp0s3 inet dhcp

iface enp0s3 inet static
address 10.54.1.111/8
gateway 10.0.0.1

[Affichage automatique sur plusieurs lignes - marche]
```

⌘ Aide ⌘ Écrire ⌘ Chercher ⌘ Couper ⌘ Exécuter ⌘ Emplacement ⌘ Annuler
⌘ Quitter ⌘ Lire fich. ⌘ Remplacer ⌘ Coller ⌘ Justifier ⌘ Aller ligne ⌘ Refaire

Présentation de l'environnement VirtualBox utilisé



Installation des paquets nécessaires (Apache2)

```
root@mustapha:~# dpkg -l | grep apache
ii apache2 2.4.56-1~deb11u2 amd64 Apache HTTP Server
ii apache2-bin 2.4.56-1~deb11u2 amd64 Apache HTTP Server
ii apache2-data 2.4.56-1~deb11u2 all Apache HTTP Server
ii apache2-doc 2.4.56-1~deb11u2 all Apache HTTP Server
ii apache2-utils 2.4.56-1~deb11u2 amd64 Apache HTTP Server
```

Vérification des ports ouverts (80 pour Apache, 22 pour SSH)

```
root@mustapha:~# ss -tln
Netid State Recv-Q Send-Q Local Address:Port Peer Address:Port Process
tcp LISTEN 0 128 0.0.0.0:80 0.0.0.0:*
tcp LISTEN 0 128 0.0.0.0:22 0.0.0.0:*
tcp LISTEN 0 128 :::22 :::*
```

Vérification des services actifs

```
root@mustapha:~# systemctl list-units --type=service --state=running
UNIT                                LOAD    ACTIVE SUB    DESCRIPTION
apache2.service                    loaded active running The Apache HTTP Server
cron.service                        loaded active running Regular background program processing daemon
dbus.service                        loaded active running D-Bus System Message Bus
getty@tty1.service                  loaded active running Getty on tty1
php7.4-fpm.service                  loaded active running The PHP 7.4 FastCGI Process Manager
rsyslog.service                     loaded active running System Logging Service
ssh.service                         loaded active running OpenBSD Secure Shell server
systemd-journald.service             loaded active running Journal Service
systemd-logind.service               loaded active running User Login Management
systemd-udevd.service                loaded active running Rule-based Manager for Device Events and Files
user@0.service                       loaded active running User Manager for UID 0

LOAD = Reflects whether the unit definition was properly loaded.
ACTIVE = The high-level unit activation state, i.e. generalization of SUB.
SUB = The low-level unit activation state, values depend on unit type.
11 loaded units listed.
root@mustapha:~#
```

Statut du service Apache2

```
root@mustapha:~# systemctl status apache2
• apache2.service - The Apache HTTP Server
   Loaded: loaded (/lib/systemd/system/apache2.service; enabled; vendor preset: enabled)
   Active: active (running) since Wed 2025-04-16 11:30:44 CEST; 27min ago
     Docs: https://httpd.apache.org/docs/2.4/
   Process: 343 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
   Process: 732 ExecReload=/usr/sbin/apachectl graceful (code=exited, status=0/SUCCESS)
   Main PID: 425 (apache2)
    Tasks: 55 (limit: 1115)
   Memory: 12.4M
      CPU: 170ms
   CGroup: /system.slice/apache2.service
           └─425 /usr/sbin/apache2 -k start
             └─987 /usr/sbin/apache2 -k start
               └─988 /usr/sbin/apache2 -k start

avril 16 11:30:43 mustapha systemd[1]: Starting The Apache HTTP Server...
avril 16 11:30:44 mustapha apachectl[412]: AH00558: apache2: Could not reliably determine the serve
avril 16 11:30:44 mustapha systemd[1]: Started The Apache HTTP Server.
avril 16 11:30:44 mustapha systemd[1]: Reloading The Apache HTTP Server.
avril 16 11:30:44 mustapha apachectl[754]: AH00558: apache2: Could not reliably determine the serve
avril 16 11:30:44 mustapha systemd[1]: Reloaded The Apache HTTP Server.
lines 1-21/21 (END)
```

Statut du service SSH

```
systemctl status ssh
• ssh.service - OpenBSD Secure Shell server
   Loaded: loaded (/lib/systemd/system/ssh.service; enabled; vendor preset: enabled)
   Active: active (running) since Wed 2025-04-16 11:30:43 CEST; 28min ago
     Docs: man:sshd(8)
           man:sshd_config(5)
   Process: 356 ExecStartPre=/usr/sbin/sshd -t (code=exited, status=0/SUCCESS)
   Main PID: 421 (sshd)
    Tasks: 1 (limit: 1115)
   Memory: 5.1M
      CPU: 32ms
   CGroup: /system.slice/ssh.service
           └─421 sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups

avril 16 11:30:43 mustapha systemd[1]: Starting OpenBSD Secure Shell server...
avril 16 11:30:43 mustapha sshd[421]: Server listening on 0.0.0.0 port 22.
avril 16 11:30:43 mustapha sshd[421]: Server listening on :: port 22.
avril 16 11:30:43 mustapha systemd[1]: Started OpenBSD Secure Shell server.
root@mustapha:~# _
```