

Université Euro Méditerranéenne Fès
Ecole d'Ingénierie Digitale et d'Intelligence Artificielle (EIDIA)



Projet de la fin de Semestre

**Administration Linux (Configuration du Serveur
DHCP,DNS,Serveur Web(Apache2))**

2023/2024

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1 Le Serveur DHCP (Dynamic Host Configuration Protocol)

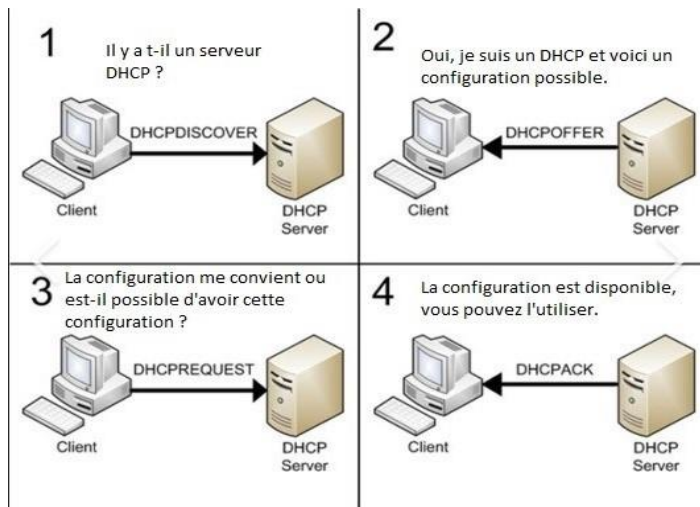
1.1 Présentation du protocole DHCP

Le protocole DHCP, (Dynamic Host Configuration Protocol) ou (Protocole de la configuration dynamique des hôtes), est un service réseau TCP/IP. Il permet aux ordinateurs clients l'obtention automatique d'une configuration réseau. Il évite la configuration de chaque ordinateur manuellement.

1.2 Fonctionnement du serveur DHCP

D'une manière générale, la Communication D'un Client sur le Réseau et l'obtention D'une Adresse IP par le Serveur passe par les Étapes Suivantes :

- **Le client DHCP diffuse un paquet DHCPDISCOVER** : le client émet une diffusion générale afin de localiser les serveurs disponibles.
- **Les serveurs DHCP diffuse un paquet DHCPOFFER** : Réponse du serveur au message DHCPDISCOVER du client Tous les serveurs DHCP disponibles envoient une offre d'adressage IP au client.
- **le client DHCP diffuse un paquet DHCPREQUEST** : Message de diffusion du client en réponse aux messages DHCPOFFER Émis par les serveurs . Ce message indique le serveur DHCP choisi, la confirmation de l'adresse reçue.
- **Le serveur DHCP diffuse un paquet DHCPACK** : Le client reçoit son adresse IP ainsi que ses paramètres optionnels (passerelle, adresse serveur DNS)



1.3 Configuration du serveur DHCP Sous Ubuntu:

'sudo apt install isc-dhcp-server': Pour L'installation Du Package Du Serveur DHCP

```
WissalBOUTAYEB@ubuntu:~$ sudo apt install isc-dhcp-server
[sudo] password for wissal:
Reading package lists... Done
Building dependency tree
Reading state information... Done
isc-dhcp-server is already the newest version (4.4.1-2.1ubuntu5.20.04.5).
0 upgraded, 0 newly installed, 0 to remove and 195 not upgraded.
```

```

WissalBOUTAYEB@ubuntu:/etc/dhcp$ ls
ddns-keys  debug  dhclient.conf  dhclient-enter-hooks.d  dhclient-exit-hooks.d  dhcpd6.conf  dhcpd.conf
WissalBOUTAYEB@ubuntu:/etc/dhcp$ sudo nano dhcpd.conf
[sudo] password for wissal:
WissalBOUTAYEB@ubuntu:/etc/dhcp$ ifconfig
ens33: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
    inet 192.168.23.129  netmask 255.255.255.0  broadcast 192.168.23.255
    inet6 fe80::d21c:2899:c7f4:1da5  prefixlen 64  scopeid 0x20<link>
    ether 00:0c:29:02:92:78  txqueuelen 1000  (Ethernet)
    RX packets 25212  bytes 35283799 (35.2 MB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 871  bytes 86026 (86.0 KB)
    TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0

ens37: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
    inet 192.168.23.133  netmask 255.255.255.0  broadcast 192.168.23.255
    inet6 fe80::ab7b:d86e:70d3:ae9e  prefixlen 64  scopeid 0x20<link>
    ether 00:0c:29:02:92:82  txqueuelen 1000  (Ethernet)
    RX packets 24059  bytes 34916823 (34.9 MB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 818  bytes 59936 (59.9 KB)
    TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
    inet 127.0.0.1  netmask 255.0.0.0
    inet6 ::1  prefixlen 128  scopeid 0x10<host>
    loop txqueuelen 1000  (Local Loopback)
    RX packets 262  bytes 24086 (24.0 KB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 262  bytes 24086 (24.0 KB)
    TX errors 0  dropped 0  overruns 0  carrier 0  collisions 0

WissalBOUTAYEB@ubuntu:/etc/dhcp$

```

```

GNU nano 4.8  dhcpd.conf
subnet 192.168.23.0 netmask 255.255.255.0 {
    range 192.168.23.100 192.168.23.200;
    option routers 192.168.23.254;
    option broadcast-address 192.168.23.255;
    option domain-name "eidia.ma";
    option domain-name-servers 192.168.23.133;
    default-lease-time 600;
    max-lease-time 7400;
}

```

Dans ce Fichier dhcpd.conf on Configure notre Serveur

Subnet on met L'Adresse Du Réseau de la carte qu'on a (ens37) Disponible Avec l'ajout du **Masque Réseau** (255.255.255.0)

range : • La directive range spécifie la plage d'adresses IP qui peut être attribuée aux clients dans le sous-réseau. Par exemple, range 192.168.23.100 192.168.23.200; indique que les adresses IP de 192.168.23.100 à 192.168.23.200 peuvent être attribuées aux clients.

option routers : • Cette directive définit la passerelle par défaut que les clients utiliseront pour accéder à d'autres réseaux. Par exemple, option routers 192.168.23.254; spécifie que la passerelle par défaut est à l'adresse IP 192.168.23.254

option-broadcast : utilisée pour lancer un broadcast

option domain-name-servers : • Cette directive spécifie les adresses IP des serveurs DNS que les clients utiliseront pour la résolution de noms (search → eidia.ma ip address → 192.168.23.133)

default-lease-time : • Cette directive définit la durée par défaut du bail (lease) en secondes pour les

adresses IP attribuées aux clients. **max-lease-time** : • Cette directive spécifie la durée maximale du bail en secondes. Les clients ne pourront pas obtenir un bail d'une durée supérieure à celle spécifiée.

```

WissalBOUTAYEB@ubuntu:/etc/dhcp$ cat /etc/default/isc-dhcp-server
# Defaults for isc-dhcp-server (sourced by /etc/init.d/isc-dhcp-server)

# Path to dhcpd's config file (default: /etc/dhcp/dhcpd.conf).
#DHCPDv4_CONF=/etc/dhcp/dhcpd.conf
#DHCPDv6_CONF=/etc/dhcp/dhcpd6.conf

# Path to dhcpd's PID file (default: /var/run/dhcpd.pid).
#DHCPDv4_PID=/var/run/dhcpd.pid
#DHCPDv6_PID=/var/run/dhcpd6.pid

# Additional options to start dhcpd with.
# Don't use options -cf or -pf here; use DHCPD_CONF/ DHCPD_PID instead
#OPTIONS=""

# On what interfaces should the DHCP server (dhcpd) serve DHCP requests?
# Separate multiple interfaces with spaces, e.g. "eth0 eth1".
INTERFACESv4="ens37"
INTERFACESv6=""
WissalBOUTAYEB@ubuntu:/etc/dhcp$

```

On specifier la carte Resaux sur lequel on doit travailler (ens37)

```

GNU nano 4.8 /etc/resolv.conf
# This file is managed by man:systemd-resolved(8). Do not edit.
#
# This is a dynamic resolv.conf file for connecting local clients to the
# internal DNS stub resolver of systemd-resolved. This file lists all
# configured search domains.
#
# Run "resolvectl status" to see details about the uplink DNS servers
# currently in use.
#
# Third party programs must not access this file directly, but only through the
# symlink at /etc/resolv.conf. To manage man:resolv.conf(5) in a different way,
# replace this symlink by a static file or a different symlink.
#
# See man:systemd-resolved.service(8) for details about the supported modes of
# operation for /etc/resolv.conf.

nameserver 192.168.23.133
options edns0 trust-ad
search eidia.ma

```

```

WissalBOUTAYEB@ubuntu:~$ sudo systemctl restart isc-dhcp-server
WissalBOUTAYEB@ubuntu:~$ sudo 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 2023-11-03 12:17:48 PDT; 9s ago
     Docs: man:dhcpd(8)
    Main PID: 2174 (dhcpd)
      Tasks: 4 (limit: 4556)
    Memory: 4.4M
    CGroup: /system.slice/isc-dhcp-server.service
            └─2174 dhcpd -user dhcpd -group dhcpd -f -4 -pf /run/dhcp-server/dhcpd.pid -cf /etc/dhcp/dhcpd.conf

Nov 03 12:17:48 ubuntu dhcpd[2174]: Database file: /var/lib/dhcp/dhcpd.leases
Nov 03 12:17:48 ubuntu dhcpd[2174]: PID file: /run/dhcp-server/dhcpd.pid
Nov 03 12:17:48 ubuntu dhcpd[2174]: Wrote 1 leases to leases file.

```

1.4 Le Test du fonctionnement Du DHCP sur une Machine Client

```

GNU nano 4.8 dhcpd.conf
subnet 192.168.23.0 netmask 255.255.255.0 {
    range 192.168.23.100 192.168.23.200;

    option routers 192.168.23.254;

    option broadcast-address 192.168.23.255;

    option domain-name "eidia.ma";

    option domain-name-servers 192.168.23.133;

    default-lease-time 600;

    max-lease-time 7400;

}

```

Windows IP Configuration

Ethernet adapter Local Area Connection:

```
Connection-specific DNS Suffix . : eidia.ma
Link-local IPv6 Address . . . . . : fe80::55e6:6d7c:9b7:4cae%11
IPv4 Address. . . . . : 192.168.23.130
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.23.254
```

C:\Users\smart lenovo>

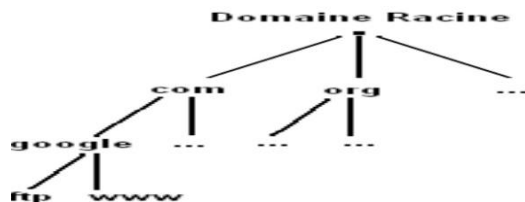
```
● isc-dhcp-server.service - ISC DHCP IPv4 server
   Loaded: loaded (/lib/systemd/system/isc-dhcp-server.service; enabled; vendor preset: enabled)
   Active: active (running) since Fri 2024-01-05 15:58:20 PST; 19min ago
     Docs: man:dhcpd(8)
   Main PID: 41183 (dhcpd)
    Tasks: 4 (limit: 4556)
   Memory: 4.4M
   CGroup: /system.slice/isc-dhcp-server.service
           └─41183 dhcpd -user dhcpd -group dhcpd -f -4 -pf /run/dhcp-server/dhcpd.pid -cf /etc/dhcp/dhcpd.conf ens37

Jan 05 16:05:02 ubuntu dhcpd[41183]: DHCPINFORM from 192.168.23.130 via ens37: not authoritative for subnet 192.168.23.0
Jan 05 16:06:06 ubuntu dhcpd[41183]: reuse_lease: lease age 130 (secs) under 25% threshold, reply with unaltered, existing lease for 192.168.23.130
Jan 05 16:06:06 ubuntu dhcpd[41183]: DHCPDISCOVER from 00:0c:29:c1:d7:24 (WIN-BOIOFSMF6CF) via ens37
Jan 05 16:06:07 ubuntu dhcpd[41183]: DHCPOFFER on 192.168.23.130 to 00:0c:29:c1:d7:24 (WIN-BOIOFSMF6CF) via ens37
Jan 05 16:06:07 ubuntu dhcpd[41183]: reuse_lease: lease age 131 (secs) under 25% threshold, reply with unaltered, existing lease for 192.168.23.130
Jan 05 16:06:07 ubuntu dhcpd[41183]: DHCPREQUEST for 192.168.23.130 (192.168.23.133) from 00:0c:29:c1:d7:24 (WIN-BOIOFSMF6CF) via ens37
Jan 05 16:06:07 ubuntu dhcpd[41183]: DHCPACK on 192.168.23.130 to 00:0c:29:c1:d7:24 (WIN-BOIOFSMF6CF) via ens37
Jan 05 16:06:10 ubuntu dhcpd[41183]: DHCPINFORM from 192.168.23.130 via ens37: not authoritative for subnet 192.168.23.0
Jan 05 16:08:50 ubuntu dhcpd[41183]: DHCPREQUEST for 192.168.23.133 from 00:0c:29:02:92:82 via ens37
Jan 05 16:08:50 ubuntu dhcpd[41183]: DHCPACK on 192.168.23.133 to 00:0c:29:02:92:82 (ubuntu) via ens37
~
```

2 Le Serveur DNS(Domain Name System)

2.1 Présentation du service DNS

DNS (Domain Name System) est un système d'appellation d'ordinateurs et de services réseau organisé selon une hiérarchie de domaines comme c'est présenté dans la figure.



2.2 Les types de serveurs de noms

- **Serveur primaire:** Un serveur est un serveur primaire pour une zone lorsque ce serveur contient l'information originale sur les noms de cette zone.
- **Serveur secondaire:** Un serveur est un serveur secondaire pour une zone lorsque ce serveur contient une copie valide de l'information originale sur les noms de cette zone
- **Serveur Cache:** Ce type de serveurs n'a l'information originale d'aucune zone. Il ne fait que gérer les informations qu'il a accumulées dans sa cache.

2.3 la configuration du Serveur DNS

La commande permettent D'installer bind9→ **Sudo apt-get install bind9**


```
WissalBOUTAYEB@ubuntu:/etc/bind$ ls
bind.keys  db.255      eidia.ma.rev  named.conf.default-zones  rndc.key
db.0       db.empty    eidia.ma.zone  named.conf.local          zones.rfc1918
db.127     db.local    named.conf     named.conf.options
```

```
WissalBOUTAYEB@ubuntu:/etc/bind$ sudo nano named.conf.local
WissalBOUTAYEB@ubuntu:/etc/bind$ sudo mkdir /root/mes_fich_config
```

```
WissalBOUTAYEB@ubuntu:/etc/bind$ sudo cp named.conf.local /root/mes_fich_config/named.conf.local_copy
```

```
GNU nano 4.8 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 "eidia.ma" IN {
    type master;
    file "/etc/bind/eidia.ma.zone";
};

zone "23.168.192.in-addr.arpa" IN {
    type master;
    file "/etc/bind/eidia.ma.rev";
};
```

Dans ce fichier (**named.conf.local**) on a Deux Zone (Directe) et (Indirecte)

La Zone Directe : contient le nom de Domain le fichier de configuration **/etc/bind/eidia.ma.zone**.

La Zone Indirect : contient l'address ip Associee au nom de Domain et le fichier de configuration **/etc/bind/eidia.ma.rev**.

```
WissalBOUTAYEB@ubuntu:/etc/bind$ sudo nano named.conf.local
WissalBOUTAYEB@ubuntu:/etc/bind$ scp db.local eidia.ma.zone
```

D'abord Avant de Configurer le Fichier eidia.ma.zone on Doit changer le nom du host par le nom de notre Domaine Following This Command line :**sudo hostname uemf**

```
GNU nano 4.8 eidia.ma.zone
; BIND data file for local loopback interface
;
$TTL      604800
@         IN      SOA      uemf.eidia.ma. root.uemf.eidia.ma. (
                                2          ; Serial
                                604800     ; Refresh
                                86400      ; Retry
                                2419200    ; Expire
                                604800 )   ; Negative Cache TTL
;

@         IN      NS       uemf.eidia.ma.
uemf      IN      A        192.168.23.133
client    IN      A        192.168.23.10
www       IN      CNAME    uemf.eidia.ma.
```

```
WissalBOUTAYEB@ubuntu:~$ sudo cp eidia.ma.zone eidia.ma.rev
```

```
GNU nano 4.8 eidia.ma.rev
; BIND data file for local loopback interface
;
$TTL      604800
@         IN      SOA      uemf.eidia.ma. root.uemf.eidia.ma. (
                        2      ; Serial
                        604800 ; Refresh
                        86400  ; Retry
                        2419200; Expire
                        604800 ) ; Negative Cache TTL
;
@         IN      NS       uemf.eidia.ma.
133       IN      PTR      uemf.eidia.ma.
10        IN      PTR      client.eidia.ma.
www       IN      CNAME     uemf.eidia.ma.
```

Dans Ces Deux fichier (eidia.ma.zone et eidia.ma.rev) on Configure les Deux Fichier de Telle sorte D'avoir le Meme Page Web que sa soit on Tappe le nom Domain ou l'address ip Associe

```
GNU nano 4.8 /etc/resolv.conf
# This file is managed by man:systemd-resolved(8). Do not edit.
#
# This is a dynamic resolv.conf file for connecting local clients to the
# internal DNS stub resolver of systemd-resolved. This file lists all
# configured search domains.
#
# Run "resolvectl status" to see details about the uplink DNS servers
# currently in use.
#
# Third party programs must not access this file directly, but only through the
# symlink at /etc/resolv.conf. To manage man:resolv.conf(5) in a different way,
# replace this symlink by a static file or a different symlink.
#
# See man:systemd-resolved.service(8) for details about the supported modes of
# operation for /etc/resolv.conf.

nameserver 192.168.23.133

search eidia.ma
```

```
WissalBOUTAYEB@ubuntu:/etc/bind$ sudo nano /etc/resolv.conf
WissalBOUTAYEB@ubuntu:/etc/bind$ ifconfig ens3 192.168.23.133/24 up
SIOCSIFADDR: Operation not permitted
SIOCSIFFLAGS: Operation not permitted
SIOCSIFNETMASK: Operation not permitted
WissalBOUTAYEB@ubuntu:/etc/bind$ sudo ifconfig ens3 192.168.23.133/24 up
WissalBOUTAYEB@ubuntu:/etc/bind$ sudo service bind9 restart
WissalBOUTAYEB@ubuntu:/etc/bind$ sudo service bind9 status
● named.service - BIND Domain Name Server
   Loaded: loaded (/lib/systemd/system/named.service; enabled; vendor preset:
   Active: active (running) since Sat 2023-12-30 15:56:10 PST; 30s ago
     Docs: man:named(8)
    Main PID: 3342 (named)
      Tasks: 8 (limit: 4556)
    Memory: 18.9M
    CGroup: /system.slice/named.service
            └─3342 /usr/sbin/named -f -u bind

Dec 30 15:56:11 ubuntu named[3342]: network unreachable resolving './DNSKEY/IN'
Dec 30 15:56:11 ubuntu named[3342]: network unreachable resolving './NS/IN': 2
Dec 30 15:56:11 ubuntu named[3342]: network unreachable resolving './DNSKEY/IN'
Dec 30 15:56:11 ubuntu named[3342]: network unreachable resolving './NS/IN': 2
Dec 30 15:56:11 ubuntu named[3342]: managed-keys-zone: Key 20326 for zone . is
Dec 30 15:56:11 ubuntu named[3342]: resolver printing query complete
Dec 30 15:56:11 ubuntu named[3342]: checkhints: b.root-servers.net/A (170.247.
Dec 30 15:56:11 ubuntu named[3342]: checkhints: b.root-servers.net/A (199.9.14
Dec 30 15:56:11 ubuntu named[3342]: checkhints: b.root-servers.net/AAAA (2801:
Dec 30 15:56:11 ubuntu named[3342]: checkhints: b.root-servers.net/AAAA (2001:
[1]+  Stopped                  sudo service bind9 status
WissalBOUTAYEB@ubuntu:/etc/bind$ nslookup
```

```

WissalBOUTAYEB@ubuntu:/etc/bind$ nslookup
> 192.168.23.133
133.23.168.192.in-addr.arpa      name = uemf.eidia.ma.
> uemf
Server:      192.168.23.133
Address:     192.168.23.133#53

Name:   uemf.eidia.ma
Address: 192.168.23.133
> uemf.eidia.ma
Server:      192.168.23.133
Address:     192.168.23.133#53

Name:   uemf.eidia.ma
Address: 192.168.23.133
> WWW
Server:      192.168.23.133
Address:     192.168.23.133#53

www.eidia.ma canonical name = uemf.eidia.ma.
Name:   uemf.eidia.ma
Address: 192.168.23.133
> client
Server:      192.168.23.133
Address:     192.168.23.133#53

Name:   client.eidia.ma
Address: 192.168.23.10

```

3 Le Serveur Web Apache2 :

3.1 Présentation du serveur web

Le travail d'un serveur web consiste à servir des sites web sur internet. Pour atteindre cet objectif, il agit comme un intermédiaire entre le serveur et les machines des clients. Il extrait le contenu du serveur sur chaque requête d'utilisateur et le transmet au web.

3.2 Les avantages d'Apache:

Open-source, et gratuit même pour un usage commercial, Logiciel fiable et stable., Mise à jour régulière, correctifs de sécurité réguliers.

3.3 la configuration du serveur Apache2 :

```

WissalBOUTAYEB@ubuntu:~$ sudo apt install apache2
Reading package lists... Done
Building dependency tree
Reading state information... Done
apache2 is already the newest version (2.4.41-4ubuntu3.15).
0 upgraded, 0 newly installed, 0 to remove and 59 not upgraded.
WissalBOUTAYEB@ubuntu:~$

```

```

WissalBOUTAYEB@ubuntu:~$ cd /etc/apache2
WissalBOUTAYEB@ubuntu:/etc/apache2$ ls
apache2.conf  conf-available  conf-enabled  envvars  magic  mods-available  mods-enabled  ports.conf  sites-available  sites-enabled
WissalBOUTAYEB@ubuntu:/etc/apache2$ cd sites-available
WissalBOUTAYEB@ubuntu:/etc/apache2/sites-available$ ls
000-default.conf  default-ssl.conf  eidia.ma.conf
WissalBOUTAYEB@ubuntu:/etc/apache2/sites-available$ sudo cp 000-default.conf eidia.ma.conf

```

Dans cette Ligne de Commande on coupe le contenu du fichier 000-default.conf dans eidia.ma.conf (notre Domain name)


```
GNU nano 4.8 eidia.ma.conf
<VirtualHost *:80>
# The ServerName directive sets the request scheme, hostname and port that
# the server uses to identify itself. This is used when creating
# redirection URLs. In the context of virtual hosts, the ServerName
# specifies what hostname must appear in the request's Host: header to
# match this virtual host. For the default virtual host (this file) this
# value is not decisive as it is used as a last resort host regardless.
# However, you must set it for any further virtual host explicitly.
ServerName uenf.eidia.ma

ServerAdmin webmaster@localhost
DocumentRoot /var/www/html

# Available loglevels: trace8, ..., trace1, debug, info, notice, warn,
# error, crit, alert, emerg.
# It is also possible to configure the loglevel for particular
# modules, e.g.
#LogLevel info ssl:warn

ErrorLog ${APACHE_LOG_DIR}/error.log
CustomLog ${APACHE_LOG_DIR}/access.log combined

# For most configuration files from conf-available/, which are
# enabled or disabled at a global level, it is possible to
# include a line for only one particular virtual host. For example the
# following line enables the CGI configuration for this host only
# after it has been globally disabled with "a2disconf".
#Include conf-available/serve-cgi-bin.conf
</VirtualHost>

# vim: syntax=apache ts=4 sw=4 sts=4 sr noet
```

On Change Dans ce fichier le nom du Serveur et le Remplacer par notre nom de domain

```
WissalBOUTAYEB@ubuntu:~$ cd /etc/apache2/sites-available
WissalBOUTAYEB@ubuntu:/etc/apache2/sites-available$ sudo nano eidia.ma.conf
WissalBOUTAYEB@ubuntu:/etc/apache2/sites-available$ cd /var/www/html/
WissalBOUTAYEB@ubuntu:/var/www/html$ ls
index.html
WissalBOUTAYEB@ubuntu:/var/www/html$ rm -rf index.html
rm: cannot remove 'index.html': Permission denied
WissalBOUTAYEB@ubuntu:/var/www/html$ sudo rm -rf index.html
WissalBOUTAYEB@ubuntu:/var/www/html$ ls
WissalBOUTAYEB@ubuntu:/var/www/html$ sudo nano index.html
```

```
GNU nano 4.8 index.html
<html>
<body>
  <marquee>
    <h1>Hello Wissal configuration Reussie de votre Serveur Web</h1>
  </marquee>
</body>
</html>
```

Désactivez ensuite l'ancienne page par défaut 000-default.conf

```
WissalBOUTAYEB@ubuntu:/etc/apache2/sites-available$ sudo a2dissite 000-default.conf
Site 000-default disabled.
To activate the new configuration, you need to run:
  systemctl reload apache2
```

Activez le fichier de configuration en utilisant « **a2ensite** »

```
WissalBOUTAYEB@ubuntu:/etc/apache2/sites-available$ sudo a2ensite eidia.ma.conf
Enabling site eidia.ma.
To activate the new configuration, you need to run:
  systemctl reload apache2
```

```
WissalBOUTAYEB@ubuntu:/etc/apache2/sites-available$ sudo systemctl reload apache2
WissalBOUTAYEB@ubuntu:/etc/apache2/sites-available$ 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 Wed 2024-01-03 06:10:18 PST; 1h 14min ago
     Docs: https://httpd.apache.org/docs/2.4/
   Process: 5191 ExecStart=/usr/sbin/apachectl start (code=exited, status=0/SUCCESS)
   Process: 5761 ExecReload=/usr/sbin/apachectl graceful (code=exited, status=0/SUCCESS)
   Main PID: 5195 (apache2)
     Tasks: 55 (limit: 4556)
    Memory: 4.8M
   CGroup: /system.slice/apache2.service
           └─5195 /usr/sbin/apache2 -k start
             └─5765 /usr/sbin/apache2 -k start
               └─5766 /usr/sbin/apache2 -k start
```

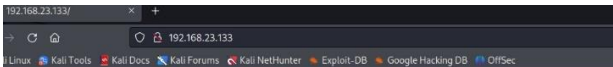
3.4 Test du fonctionnement du Serveur



Hello Wissal configuration Reussie de votre Serveur Web



Hello Wissal configuration Reussie de votre Serveur Web



o Wissal configuration Reussie de votre Serveur Web

Bonnu (Hebergement De plateforme de Gestion des Etudiants dans le Serveur Web)

```
WissalBOUTAYEB@ubuntu:/var/www/html$ cd WF_projectPHP
bash: cd: WF_projectPHP: No such file or directory
WissalBOUTAYEB@ubuntu:/var/www/html$ cd ..
WissalBOUTAYEB@ubuntu:/var/www$ cd WF_projectPHP
bash: cd: WF_projectPHP: No such file or directory
WissalBOUTAYEB@ubuntu:/var/www$ ls
html WF_projectPHP
WissalBOUTAYEB@ubuntu:/var/www$ cd WF_projectPHP
WissalBOUTAYEB@ubuntu:/var/www/WF_projectPHP$ ls
admin_page.php  bases de DONNÉES SQL  PROJET GESTION DES ETUDIANTS.txt  Gestion_modules.php  Gmodules_update.php  logout.php  register_forn.php
admission.php  config.php  Getudiant_update.php  Gestion_notes.php  Gnotes_update.php  navigateurBar.css  user_page.php
background.jpg  Gestion_etudiant.php  login_forn.php  pageHome.php
```

```
GNU nano 4.8                                eidia.ma.conf
# VirtualHost *:80>
#
# The ServerName directive sets the request scheme, hostname and port that
# the server uses to identify itself. This is used when creating
# redirection URLs. In the context of virtual hosts, the ServerName
# specifies what hostname must appear in the request's Host: header to
# match this virtual host. For the default virtual host (this file) this
# value is not decisive as it is used as a last resort host regardless.
# However, you must set it for any further virtual host explicitly.
ServerName uenf.eidia.ma

ServerAdmin webmaster@localhost
DocumentRoot /var/www/WF_projectPHP

# Available loglevels: trace8, ..., trace1, debug, info, notice, warn,
# error, crit, alert, emerg.
# It is also possible to configure the loglevel for particular
# modules, e.g.
#LogLevel info ssl:warn

ErrorLog ${APACHE_LOG_DIR}/error.log
CustomLog ${APACHE_LOG_DIR}/access.log combined

# For most configuration files from conf-available/, which are
# enabled or disabled at a global level, it is possible to
# include a line for only one particular virtual host. For example the
# following line enables the CGI configuration for this host only
# after it has been globally disabled with "a2disconf".
#Include conf-available/serve-cgi-bin.conf

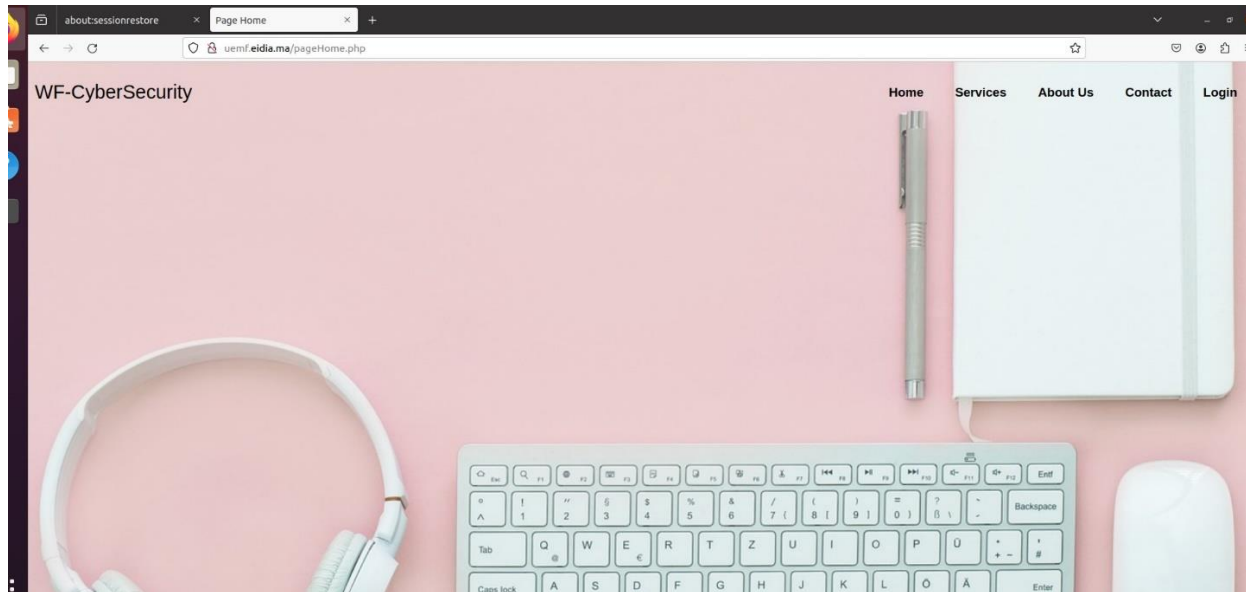
</VirtualHost>

# vim: syntax=apache ts=4 sw=4 sts=4 sr noet
```

```

MissalBOUTAYEB@ubuntu:/var/www$ cd WF_projetPHP
MissalBOUTAYEB@ubuntu:/var/www/WF_projetPHP$ ls
admin_page.php  'BASES de DONNÉES SQL PROJET GESTION DES ETUDIANTS.txt'  Gestion_modules.php  Gmodules_update.php  logout.php  register_form.php
admission.php   config.php                                                  Gestion_notes.php    Gnotes_update.php    navigateurBar.css  user_page.php
background.jpg  Gestion_etudiant.php  Getudiant_update.php  login_form.php        pageHome.php
MissalBOUTAYEB@ubuntu:/var/www/WF_projetPHP$ cd /etc/apache2/sites-available
MissalBOUTAYEB@ubuntu:/etc/apache2/sites-available$ ls
000-default.conf  default-ssl.conf  eidia.ma.conf
MissalBOUTAYEB@ubuntu:/etc/apache2/sites-available$ sudo nano eidia.ma.conf
MissalBOUTAYEB@ubuntu:/etc/apache2/sites-available$ sudo nano eidia.ma.conf
MissalBOUTAYEB@ubuntu:/etc/apache2/sites-available$ sudo a2ensite eidia.ma.conf
Site eidia.ma already enabled
MissalBOUTAYEB@ubuntu:/etc/apache2/sites-available$ sudo systemctl restart apache2
MissalBOUTAYEB@ubuntu:/etc/apache2/sites-available$

```



The screenshot shows a web browser window with the address bar displaying 'uemf.eidia.ma/Gestion_etudiant.php'. The page title is 'WF-CyberSecurity'. The navigation bar at the top contains links: Accueil, Gestion des étudiants, Gestion des modules, Gestion des Notes, Gestion des admis, and Deconnexion. The main content area has a pink background with a central form titled 'Ajouter un étudiant'. The form contains the following fields and a button:

- Entrez le nom de l'etudiant
- Entrez le prenom de l'etudiant
- mm / dd / yyyy
- Entrez la matricule
- Ajouter l'étudiant