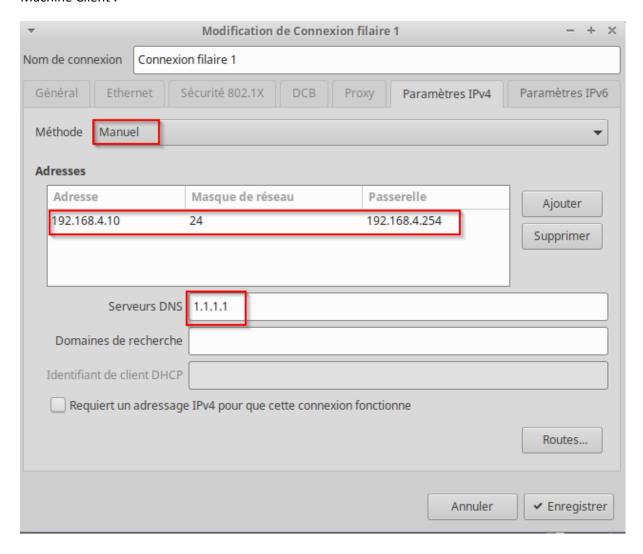
## Machine Client:



```
Fichier Édition Affichage Terminal Onglets Aide

Liam@liam-VirtualBox:~$ ping google.fr
PING google.fr (142.250.75.227) 56(84) bytes of data.

4 octets de parl0s41-in-f3.1e100.net (142.250.75.227) : icmp_seq=1 ttl=110 temp =9.85 ms

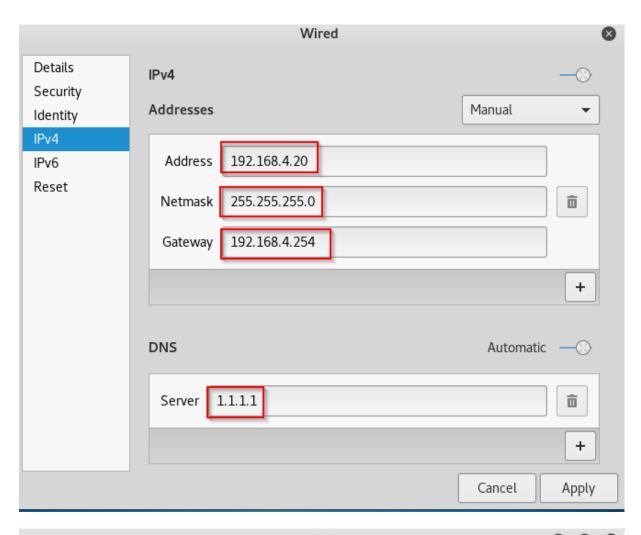
4 octets de parl0s41-in-f3.1e100.net (142.250.75.227) : icmp_seq=2 ttl=110 temp =10.8 ms

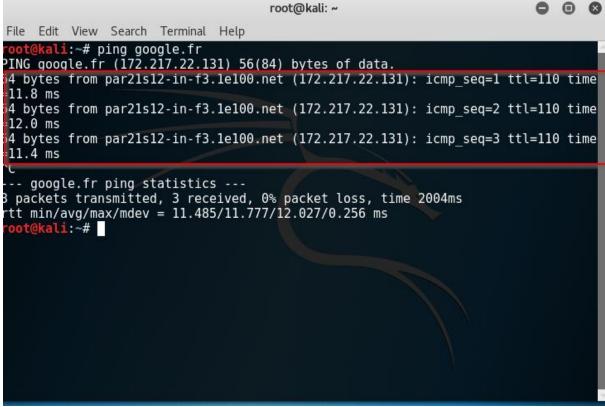
4 octets de parl0s41-in-f3.1e100.net (142.250.75.227) : icmp_seq=3 ttl=110 temp =10.5 ms

--- statistiques ping google.fr ---
3 paquets transmis, 3 reçus, 0 % paquets perdus, temps 2009 ms
rtt min/avg/max/mdev = 9.845/10.377/10.759/0.388 ms

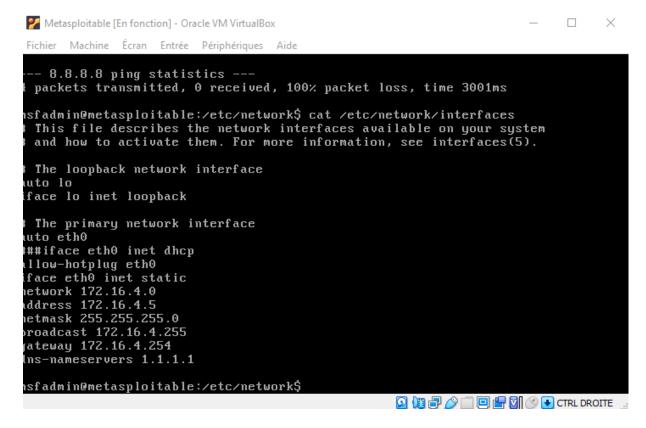
Liam@liam-VirtualBox:~$
```

Kali Linux:



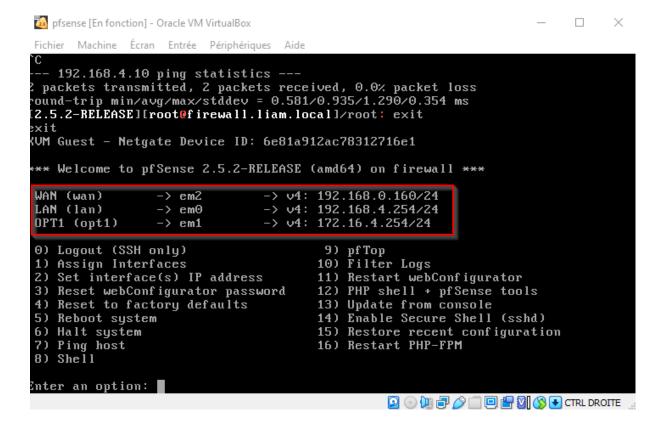


## Metasploit:



### Pfsense:

Installation: https://techexpert.tips/fr/pfsense-fr/installation-du-serveur-pfsense/

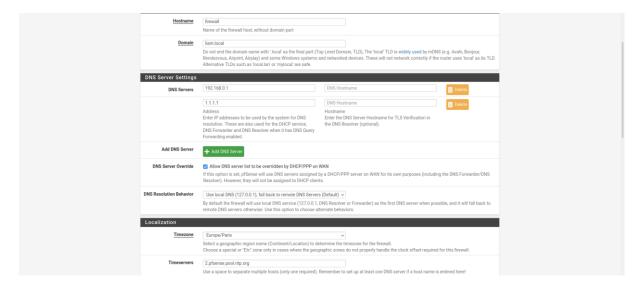


Identifiants de connexion :

admin

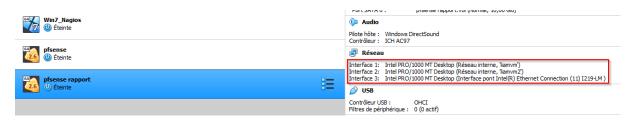
pfsense

Eléments modifié dans la page de mise en route pfsense :

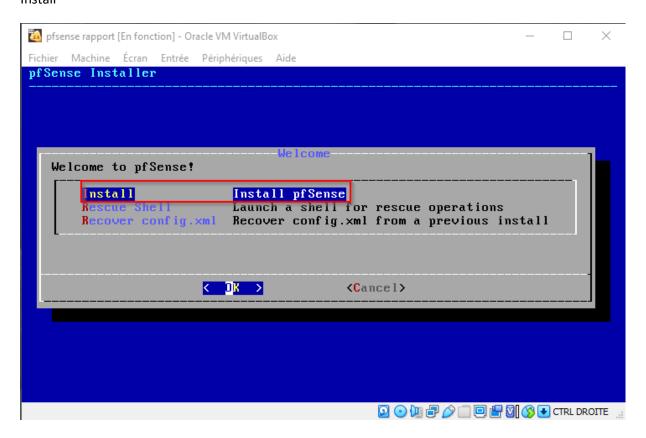


# Rapport détaillé pfsense :

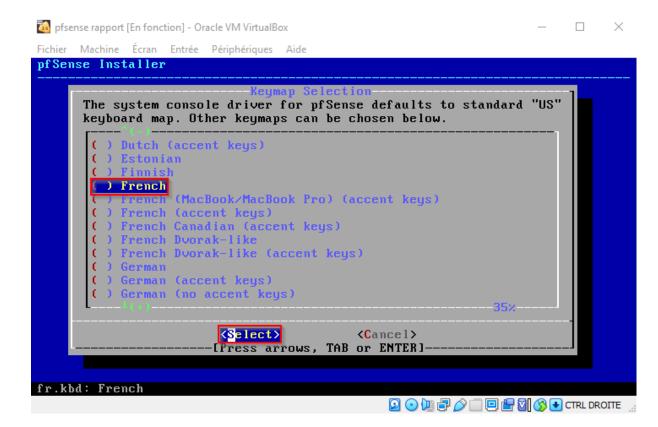
Configuration de 3 cartes réseau sous virtualbox :



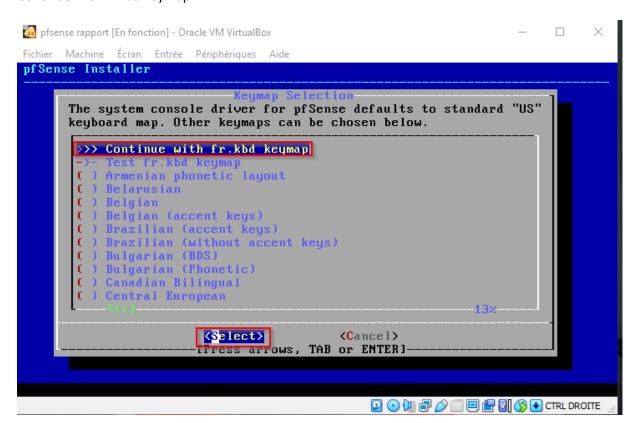
## Install



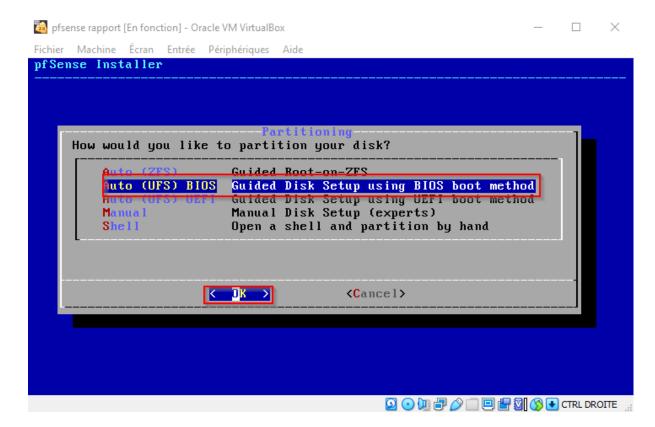
Clavier français (french)



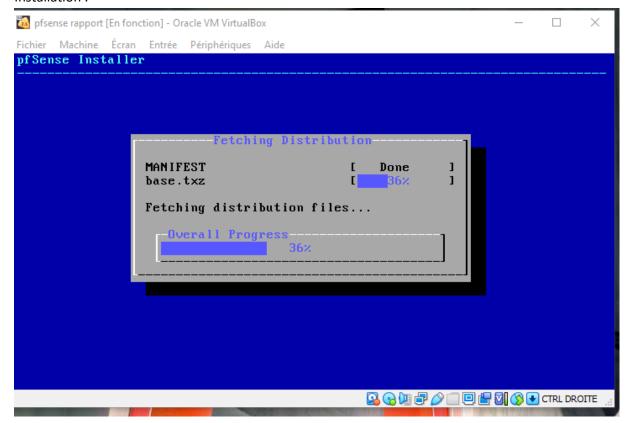
## Continue with fr.kbd keymap



Utiliser la méthode automatique BIOS



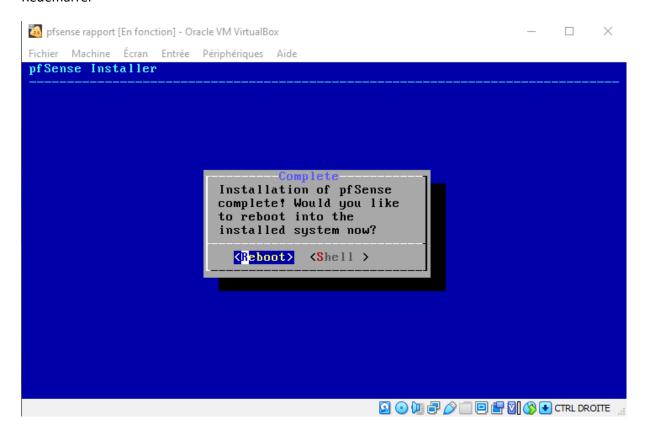
### Installation:



Sélectionner non



### Redémarrer



Configuration des cartes réseaux :

Réseau WAN:

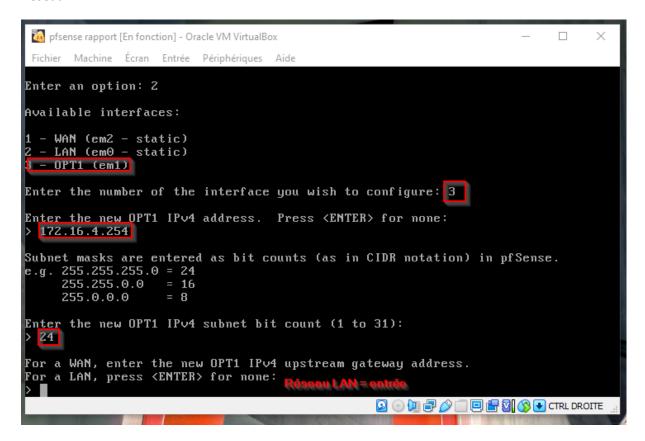
```
pfsense rapport [En fonction] - Oracle VM VirtualBox
                                                                                          П
 Fichier Machine Écran Entrée Périphériques Aide
Starting syslog...done.
Starting CRON... done.
pfSense 2.5.2-RELEASE amd64 Fri Jul 02 15:33:00 EDT 2021
Bootup complete
FreeBSD/amd64 (pfSense.home.arpa) (ttyv0)
KVM Guest - Netgate Device ID: 110a33450d77a6c2983b
*** Welcome to pfSense 2.5.2-RELEASE (amd64) on pfSense ***
 WAN (wan)
                     -> em0
                                      ->
-> ∨4: 192.168.1.1/24
 LAN (lan)
                     -> em1
                                                9) pf Top
 Logout (SSH only)
                                                10) Filter Logs
 1) Assign Interfaces
 2) Set interface(s) IP address
                                                11) Restart webConfigurator
                                                12) PHP shell + pfSense tools
 3) Reset webConfigurator password
 4) Reset to factory defaults
                                                13) Update from console
                                                14) Enable Secure Shell (sshd)
 5) Reboot system
 6) Halt system
7) Ping host
                                               15) Restore recent configuration
16) Restart PHP-FPM
 8) Shell
Enter an option: 1
                                                           pfsense rapport [En fonction] - Oracle VM VirtualBox
                                                                                          \times
 Fichier Machine Écran Entrée Périphériques Aide
 0) Logout (SSH only)
                                                 9) pfTop
                                                10) Filter Logs
 1) Assign Interfaces
                                                11) Restart webConfigurator
2) Set interface(s) IP address
3) Reset webConfigurator password4) Reset to factory defaults
                                               12) PHP shell + pfSense tools
13) Update from console
5) Reboot system
                                                14) Enable Secure Shell (sshd)
                                               15) Restore recent configuration 16) Restart PHP-FPM
6) Halt system
 7) Ping host
8) Shell
Enter an option: 1
Valid interfaces are:
         08:00:27:48:cc:1b (up) Intel(R) PRO/1000 Network Connection 08:00:27:c4:9d:69 (up) Intel(R) PRO/1000 Network Connection 08:00:27:a0:ce:0c (down) Intel(R) PRO/1000 Network Connection
em0
em1
em2
Do VLANs need to be set up first?
If VLANs will not be used, or only for optional interfaces, it is typical to say no here and use the webConfigurator to configure VLANs later, if required.
Should VLANs be set up now [yin]? n
```

```
pfsense rapport [En fonction] - Oracle VM VirtualBox
                                                                                                  Fichier Machine Écran Entrée Périphériques Aide
Jalid interfaces are:
em0 08:00:27:48:cc:1b (up) Intel(R) PRO/1000 Network Connection
m1 08:00:27:c4:9d:69 (up) Intel(R) PRO/1000 Network Connection
          08:00:Z7:a0:ce:0c (down) Intel(K) PKU/1000 Network Connection
emZ.
Oo ULANs need to be set up first?
If VLANs will not be used, or only for optional interfaces, it is typical to say no here and use the webConfigurator to configure VLANs later, if required.
Should VLAMs be set up now [yin]? n
If the names of the interfaces are not known, auto-detection can
be used instead. To use auto-detection, please disconnect all
interfaces before pressing 'a' to begin the process.
Enter the WAN interface name or 'a' for auto-detection
(em0 em1 em2 or a): em2
Enter the LAN interface name or 'a' for auto-detection HOTE: this enables full Firewalling/NAT mode.
(em0 em1 a or nothing if finished): em0
Enter the Optional 1 interface name or 'a' for auto-detection (em1 a or nothing if finished): em1
                                                                🔯 💿 🍱 🗗 🥟 i 🖳 🖭 🚰 🔯 🚫 💽 CTRL DROITE 🖫
🔯 pfsense rapport [En fonction] - Oracle VM VirtualBox
                                                                                                  \Box
Fichier Machine Écran Entrée Périphériques Aide
say no here and use the webConfigurator to configure VLANs later, if required.
Should VLANs be set up now [yin]? n
If the names of the interfaces are not known, auto-detection can
be used instead. To use auto-detection, please disconnect all
interfaces before pressing 'a' to begin the process.
Enter the WAN interface name or 'a' for auto-detection
(em0 em1 em2 or a): em2
Enter the LAN interface name or 'a' for auto-detection
NOTE: this enables full Firewalling/NAT mode.
(em0 em1 a or nothing if finished): em0
Enter the Optional 1 interface name or 'a' for auto-detection (em1 a or nothing if finished): em1
The interfaces will be assigned as follows:
JAN -> em2
JAN -> em0
PT1 -> em1
o you want to proceed [yin]? y
                                                                🔯 💿 🍱 🗗 🤌 🔚 🗐 🚰 🔯 🚫 💽 CTRL DROITE 🗼
```

```
\times
🔯 pfsense rapport [En fonction] - Oracle VM VirtualBox
                                                                             Fichier Machine Écran Entrée Périphériques Aide
PT1 -> em1
o you want to proceed [yin]? y
riting configuration...done.
lne moment while the settings are reloading... done!
UM Guest - Netgate Device ID: 110a33450d77a6c2983b
*** Welcome to pfSense 2.5.2-RELEASE (amd64) on pfSense ***
WAN (wan)
LAN (lan)
                 -> em2
                                 -> v4: 192.168.1.1/24
                 -> em0
OPT1 (opt1)
                 -> em1
0) Logout (SSH only)
                                          9) pfTop
                                         10) Filter Logs
1) Assign Interfaces
2) Set interface(s) IP address
3) Reset webConfigurator password
                                         11) Restart webConfigurator
                                         12) PHP shell + pfSense tools
4) Reset to factory defaults
                                         13) Update from console
5) Reboot system
                                         14) Enable Secure Shell (sshd)
6) Halt system
                                         15) Restore recent configuration
7) Ping host
8) Shell
                                         16) Restart PHP-FPM
inter an option: 2🔃
                                                   🖸 🕣 💯 🗗 🥟 i 🖳 🖳 🚰 🕅 🚫 💽 CTRL DROITE
 pfsense rapport [En fonction] - Oracle VM VirtualBox
                                                                              X
 Fichier Machine Écran Entrée Périphériques Aide
Available interfaces:
1 - WAN (em2 - dhcp, dhcp6)
 - LAN (em0 -
- OPT1 (em1)
                static)
Enter the number of the interface you wish to configure: 1
Configure IPv4 address WAN interface via DHCP? (y/n) n
Enter the new WAN IPv4 address. Press (ENTER) for none:
  192.168.0.160
Subnet masks are entered as bit counts (as in CIDR notation) in pfSense.
e.g. 255.255.255.0 = 24
     255.255.0.0
255.0.0.0
                    = 8
Enter the new WAN IPv4 subnet bit count (1 to 31):
for a WAN, enter the new WAN IPv4 upstream gateway address.
For a LAN, press <ENTER> for none:
> 192.168.0.3
```

```
pfsense rapport [En fonction] - Oracle VM VirtualBox
                                                                          Fichier Machine Écran Entrée Périphériques Aide
Enter the new WAN IPv4 subnet bit count (1 to 31):
 24
for a WAN, enter the new WAN IPv4 upstream gateway address.
For a LAN, press <ENTER> for none:
 192.168.0.3
Configure IPv6 address WAN interface via DHCP6? (y/n) 📊
Enter the new WAN IPv6 address.
                                 Press <ENTER> for none:
Disabling IP∨4 DHCPD...
Disabling IP∨6 DHCPD...
Do you want to revert to HTTP as the webConfigurator protocol? (y/n) y
Please wait while the changes are saved to WAN...
Reloading filter...
Reloading routing configuration...
DHCPD..
Restarting webConfigurator...
The IPv4 WAN address has been set to 192.168.0.160/24
Press <ENTER> to continue.
                                                 🔯 💿 🕼 🗗 🧷 🔲 🖭 🚰 🔯 🚫 💽 CTRL DROITE 🗼
Réseau LAN 1:
pfsense rapport [En fonction] - Oracle VM VirtualBox
                                                                           X
Fichier Machine Écran Entrée Périphériques Aide
Enter an option: 2
Available interfaces:
 - WAN (em2 - static)
 - LAN (em0 - static)
   OPT1 (em1)
Inter the number of the interface you wish to configure: 2
Enter the new LAN IPv4 address. Press <ENTER> for none:
 192.168.4.254
Subnet masks are entered as bit counts (as in CIDR notation) in pfSense.
.g. 255.255.255.0 = 24
    255.255.0.0
                   = 16
    255.0.0.0
                   = 8
Inter the new LAN IPv4 subnet bit count (1 to 31):
For a WAN, enter the new LAN IPv4 upstream gateway address.
or a LAN, press (ENTER) for none:
```

### Réseau LAN 2:

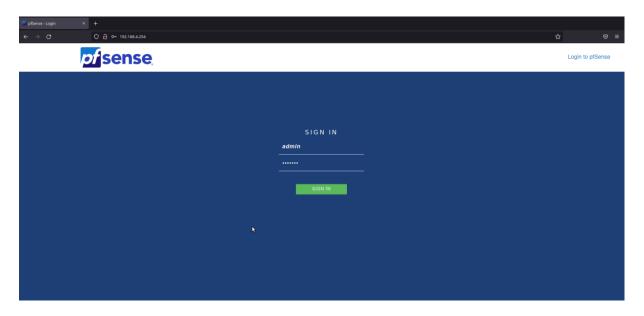


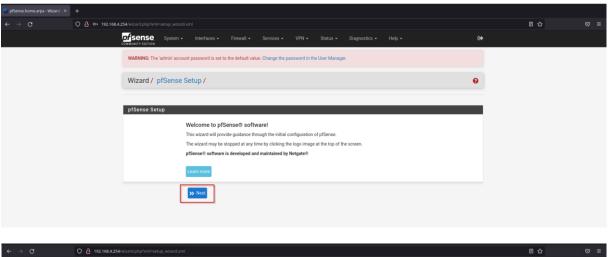
```
pfsense rapport [En fonction] - Oracle VM VirtualBox
                                                                      - □ ×
Fichier Machine Écran Entrée Périphériques Aide
     255.255.0.0
                   = 16
= 8
    255.0.0.0
Inter the new OPT1 IPv4 subnet bit count (1 to 31):
for a WAN, enter the new OPT1 IPv4 upstream gateway address. For a LAN, press <ENTER> for none:
Inter the new OPT1 IPv6 address. Press (ENTER) for none:
Do you want to enable the DHCP server on OPT1? (y/n) n
Disabling IPv4 DHCPD...
)isabling IP∨6 DHCPD...
lease wait while the changes are saved to OPT1...
Reloading filter...
Reloading routing configuration...
DHCPD...
The IPv4 OPT1 address has been set to 172.16.4.254/24
ress <ENTER> to continue.
```

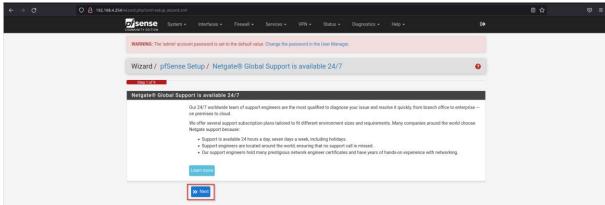
Sur l'ordinateur client, se connecter sur 192.168.4.254 avec les identifiants :

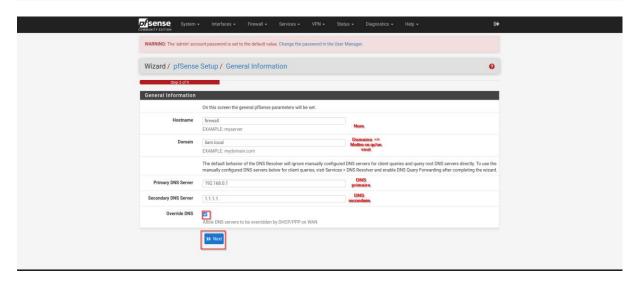
admin

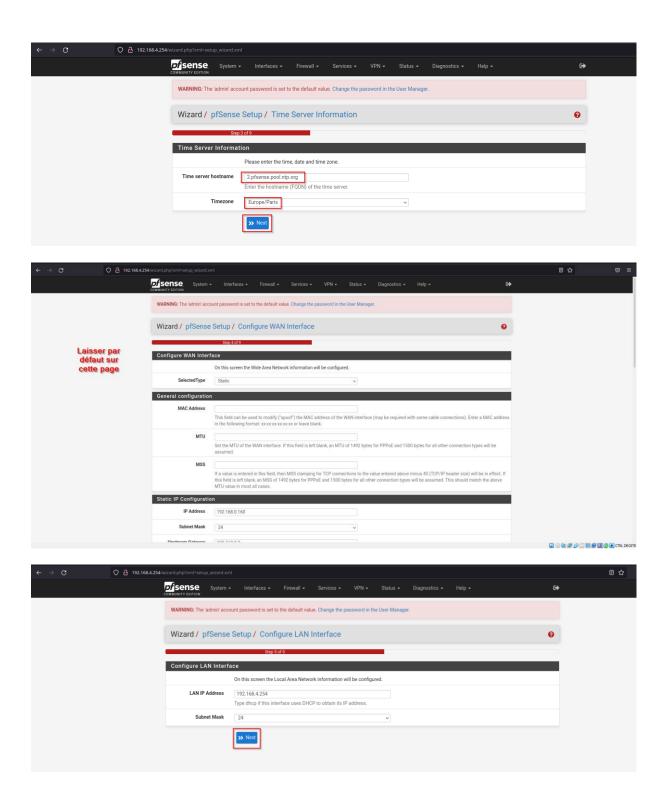
pfsense

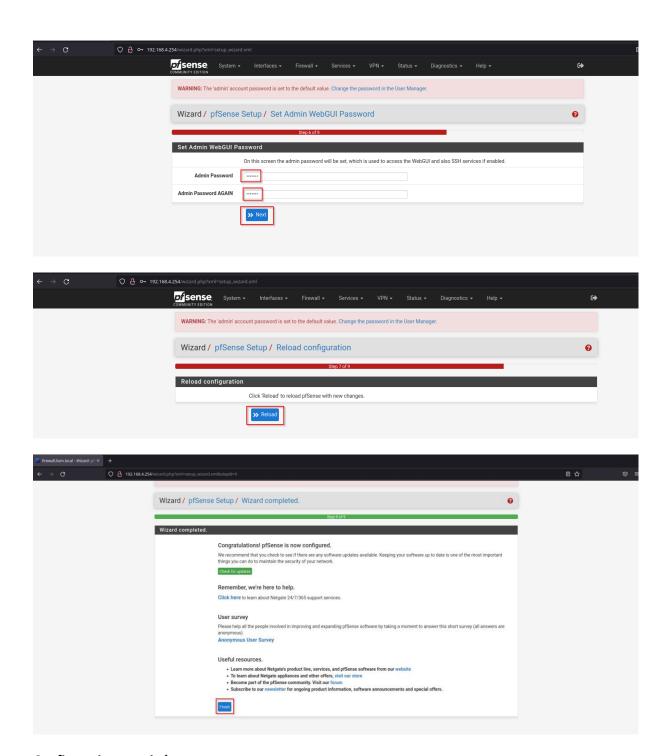












# Configuration terminée :

