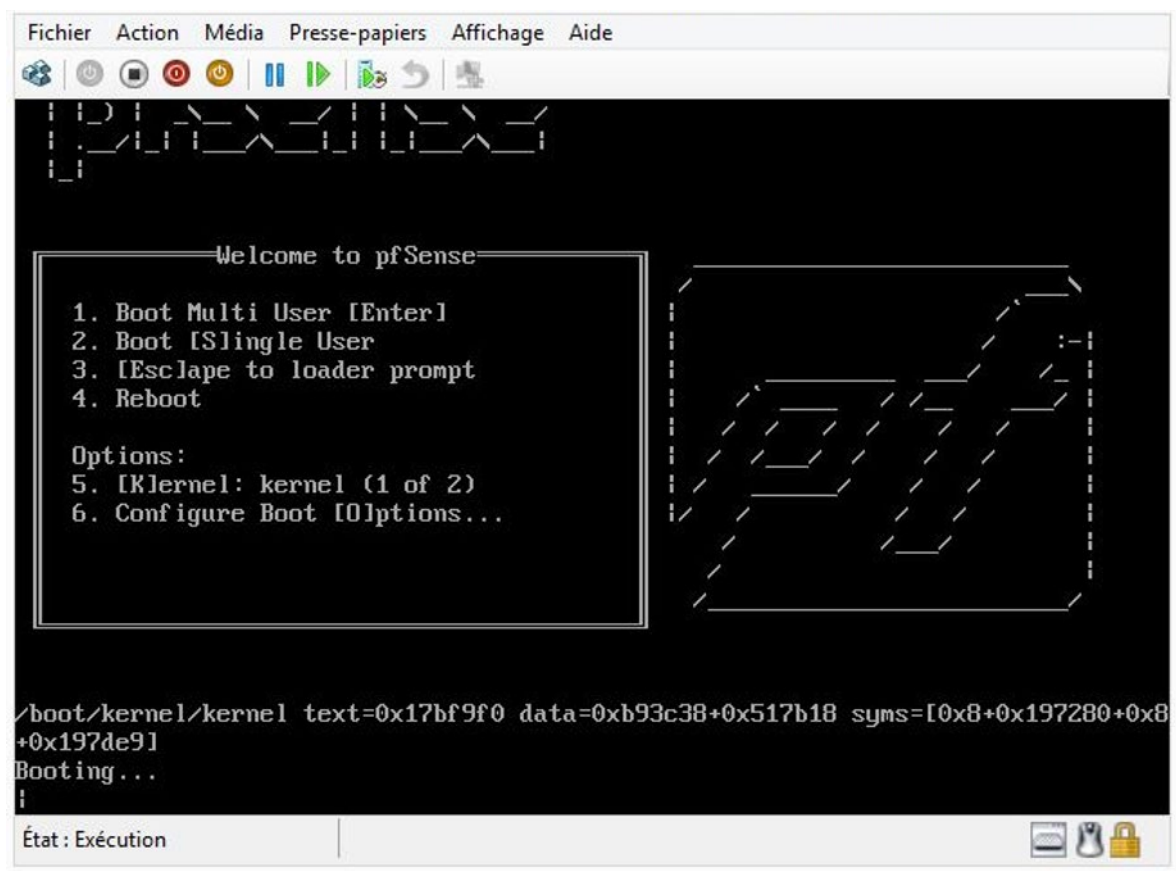


Installation de pfSense

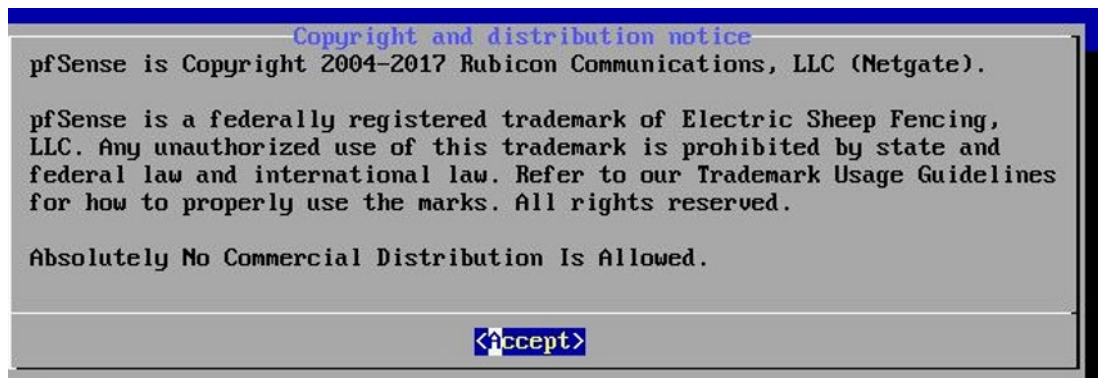
Récupérez les informations liées à votre propre réseau. Dans ce mode opératoire, nous utiliserons les éléments suivants :

- IP Réseau local (LAN): 172.16.0.101/16
- IP Réseau INTERNET (WAN) : 192.168.42.1/24
- IP DMZ : 172.17.0.101/16
- IP PASSERELLE Internet : 192.168.42.254/24 (Ip du routeur ou box internet)
- IP DNS1 Internet : 192.168.42.254 (Passerelle d'accès à internet / Box)
- IP DNS2 Internet : 8.8.8.8 (DNS Google)

Démarrer la VM



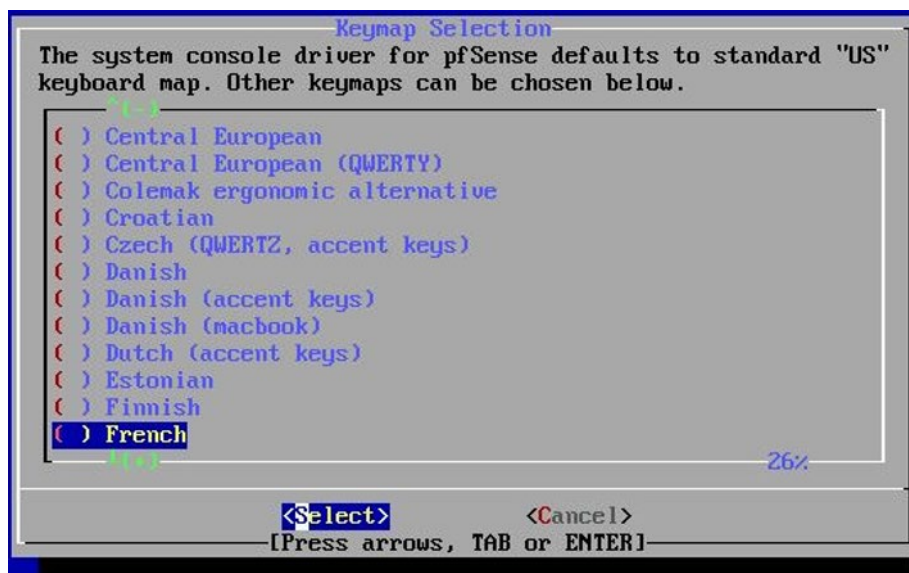
Accepter la licence



Install pfSense : OK



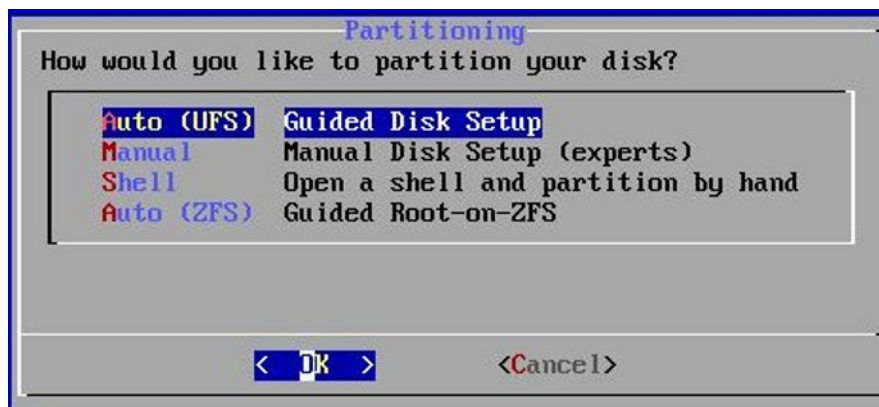
Sélectionner French dans le menu déroulant



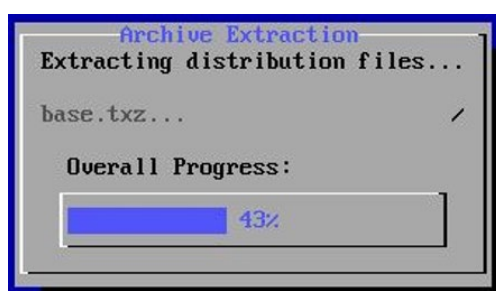
Sélectionner le type et la langue du clavier : Continue with fr.kbd keymap



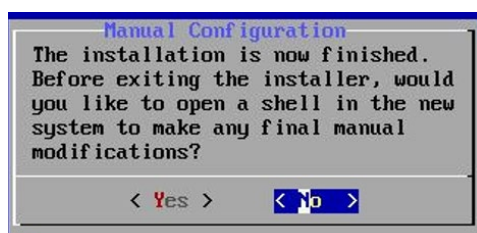
Auto (UFS) : OK



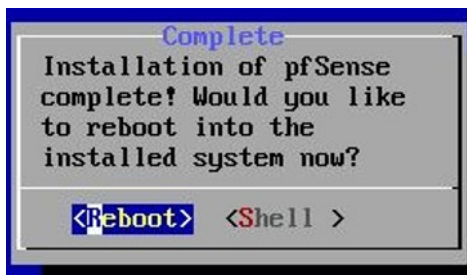
Patientez pendant l'installation



Sélectionner : No



Sélectionner : Reboot (Ne pas oublier d'éjecter le CD avant le redémarrage)



Saisissez "n" pour "no" pour la création de VLAN

```
AMD Features2=0x21<LAHF,ABM>
Structured Extended Features=0x2bb9<FSGSBASE,BMI1,HLE,AUX2,SMEP,BMI2,ERMS,RTM,
NFPUSG>
XSAVE Features=0x1<XSAVEOPT>
Hypervisor: Origin = "Microsoft Hv"
Done.
..... done.
Initializing..... done.
Starting device manager (devd)...done.
Loading configuration.....done.
Updating configuration.....done.
Warning: Configuration references interfaces that do not exist: em0 em1

Network interface mismatch -- Running interface assignment option.

Valid interfaces are:

hn0      00:15:5d:64:04:3f (down) Hyper-V Network Interface
hn1      00:15:5d:64:04:40 (down) Hyper-V Network Interface

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 [y|n]? n
```

Sélectionner la carte réseau internet WAN : hn0 – (Voir dans Hyper-V l'adresse MAC qui correspond à la carte)

```

Initializing..... done.
Starting device manager (devd)...done.
Loading configuration.....done.
Updating configuration.....done.
Warning: Configuration references interfaces that do not exist: em0 em1

Network interface mismatch -- Running interface assignment option.

Valid interfaces are:

hn0      00:15:5d:64:04:3f (down) Hyper-V Network Interface
hn1      00:15:5d:64:04:40 (down) Hyper-V Network Interface

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 [y|n]? 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
(hn0 hn1 or a): hn0

```

Sélectionner la carte réseau local LAN : hn1 – (Voir dans Hyper-V l'adresse MAC qui correspond à la carte)

```

Warning: Configuration references interfaces that do not exist: em0 em1

Network interface mismatch -- Running interface assignment option.

Valid interfaces are:

hn0      00:15:5d:64:04:3f (down) Hyper-V Network Interface
hn1      00:15:5d:64:04:40 (down) Hyper-V Network Interface

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 [y|n]? 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
(hn0 hn1 or a): hn0

Enter the LAN interface name or 'a' for auto-detection
NOTE: this enables full Firewalling/NAT mode.
(hn1 a or nothing if finished): hn1

```

Appliquer les changements : “y” pour “yes”

```

The interfaces will be assigned as follows:

WAN  -> hn0
LAN  -> hn1

Do you want to proceed [y|n]? y

```


Maintenant les cartes sont attribuées aux interfaces

```
Starting syslog...done.
Starting CRON... done.
pfSense 2.4.4-RELEASE amd64 Thu Sep 20 09:03:12 EDT 2018
Bootup complete

FreeBSD/amd64 (pfSense.localdomain) (ttyv0)

Hyper-V Virtual Machine - Netgate Device ID: 391ed73786ee43989c09

*** Welcome to pfSense 2.4.4-RELEASE (amd64) on pfSense ***

WAN (wan)      -> hm0      -> v4/DHCP4: 192.168.100.150/24
LAN (lan)      -> hm1      -> v4: 192.168.1.1/24

0) Logout (SSH only)          9) pfTop
1) Assign Interfaces          10) Filter Logs
2) Set interface(s) IP address 11) Restart webConfigurator
3) Reset webConfigurator password 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                  16) Restart PHP-FPM
8) Shell

Enter an option: █
```

Retour au Menu

Configuration de l'adresse IP de la carte réseau local LAN hn1

Sélectionner option 2 (Set interface IP address) pour configure les interfaces

```
0) Logout (SSH only)          9) pfTop
1) Assign Interfaces          10) Filter Logs
2) Set interface(s) IP address 11) Restart webConfigurator
3) Reset webConfigurator password 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                  16) Restart PHP-FPM
8) Shell

Enter an option: 2 █
```

Sélectionner la carte réseau local LAN : 2

```
Available interfaces:

1 - WAN (hm0 - dhcp, dhcp6)
2 - LAN (hm1 - static)

Enter the number of the interface you wish to configure: 2 █
```

Saisissez l'adresse IP souhaitée : 172.16.0.101 (pour notre exemple)

```
Enter the new LAN IPv4 address. Press <ENTER> for none:
> 172.16.0.101 █
```

Saisissez le masque sous réseau au format CIDR : 16

```
Subnet masks are entered as bit counts (as in CIDR notation) in pfSense.  
e.g. 255.255.255.0 = 24  
     255.255.0.0   = 16  
     255.0.0.0     = 8  
  
Enter the new LAN IPv4 subnet bit count (1 to 31):  
>16
```

Laissez vide pour ne pas définir la passerelle : Tapez ENTREE

```
For a WAN, enter the new LAN IPv4 upstream gateway address.  
For a LAN, press <ENTER> for none:  
>
```

Laissez vide pour ne pas définir d'adresse IPV6 : Tapez ENTREE

```
Enter the new LAN IPv6 address. Press <ENTER> for none:  
>
```

Activer le Serveur DHCP : dans notre cas on n'a pas besoin donc « n »

```
Do you want to enable the DHCP server on LAN? (y/n) n
```

Activez le retour à http en tant que protocole de configuration Web. Entrez : y

```
Do you want to revert to HTTP as the webConfigurator protocol? (y/n) y
```

Configuration terminée. Cliquez : ENTREE

```
Please wait while the changes are saved to LAN...  
Reloading filter...  
Reloading routing configuration...  
DHCPD...  
Restarting webConfigurator...  
  
The IPv4 LAN address has been set to 172.16.0.101  
You can now access the webConfigurator by opening the following URL in your web  
browser:  
    http://172.16.0.101  
Press <ENTER> to continue.
```

Retour au Menu. L'adresse IP de pfSense est notée dans la partie LAN : 172.16.0.101

```

Hyper-V Virtual Machine - Netgate Device ID: 391ed73786ee43989c09

*** Welcome to pfSense 2.4.4-RELEASE (amd64) on pfSense ***

WAN (wan)      -> hn0      -> v4/DHCP4: 192.168.100.150/24
LAN (lan)      -> hn1      -> v4: 192.168.2.1/24

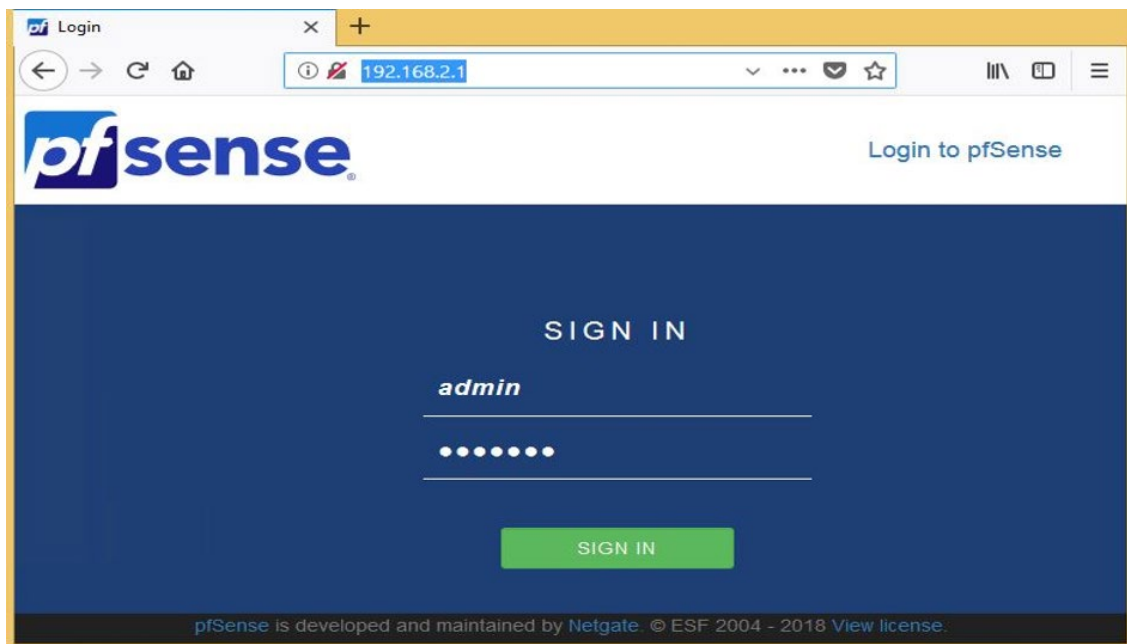
0) Logout (SSH only)          9) pfTop
1) Assign Interfaces          10) Filter Logs
2) Set interface(s) IP address 11) Restart webConfigurator
3) Reset webConfigurator password 12) PHP shell + pfSense tools
4) Reset to factory defaults    13) Update from console
5) Reboot system              14) Enable Secure Shell (sshd)
6) Halt system                15) Restore recent configuration
7) Ping host                  16) Restart PHP-FPM
8) Shell

Enter an option:

```

On peut maintenant accéder à l'interface du Pfsense via <http://172.16.0.101>

Tapez L'adresse IP dans le navigateur : 172.16.0.101 – Username : admin – Password : pfsense



Configuration de l'installation de Base de pfSense

Sélectionner : Next



Renseigner : Hostname , Domain , Primary DNS (Routeur / Box) , Secondary DNS (Google) et cocher Override DNS

Wizard / pfSense Setup / General Information ?

Step 2 of 9

General Information

On this screen the general pfSense parameters will be set.

Hostname
EXAMPLE: myserver

Domain
EXAMPLE: mydomain.com

The default behavior of the DNS Resolver will ignore manually configured DNS servers for client queries and query root DNS servers directly. To use the manually configured DNS servers below for client queries, visit Services > DNS Resolver and enable DNS Query Forwarding after completing the wizard.

Primary DNS Server

Secondary DNS Server

Override DNS ☒
Allow DNS servers to be overridden by DHCP/PPP on WAN

» Next

Sélectionner la Timezone Europe

pfSense
COMMUNITY EDITION

WARNING: The 'admin' account password is set to the default value. [Change the password in the User Manager.](#)

Wizard / pfSense Setup / Time Server Information

Step 3 of 9

Time Server Information

Please enter the time, date and time zone.

Time server hostname

0.pfsense.pool.ntp.org

Enter the hostname (FQDN) of the time server.

Timezone

Europe/Paris

» Next

Configuration de la carte réseau internet WAN : 192.168.42.1, Masque sous réseau (CIDR) : 24, la passerelle (Routeur / Box) : 192.168.42.254

Wizard / pfSense Setup / Configure WAN Interface

Step 4 of 9

Configure WAN Interface

On this screen the Wide Area Network information will be configured.

SelectedType

Static

Static IP Configuration

IP Address

192.168.42.1

Subnet Mask

24

Upstream Gateway

192.168.42.254

RFC1918 Networks

Block RFC1918 Private Networks

☒ Block private networks from entering via WAN

When set, this option blocks traffic from IP addresses that are reserved for private networks as per RFC 1918 (10/8, 172.16/12, 192.168/16) as well as loopback addresses (127/8). This option should generally be left turned on, unless the WAN network lies in such a private address space, too.

Block bogon networks

Block bogon networks

☒ Block non-Internet routed networks from entering via WAN

When set, this option blocks traffic from IP addresses that are reserved (but not RFC 1918) or not yet assigned by IANA. Bogons are prefixes that should never appear in the Internet routing table, and obviously should not appear as the source address in any packets received.

» Next

Vérification de la configuration de la carte réseau local LAN

Wizard / pfSense Setup / Configure LAN Interface

Step 5 of 9

Configure LAN Interface

On this screen the Local Area Network information will be configured.

LAN IP Address: **172.16.0.101**
Type dhcp if this interface uses DHCP to obtain its IP address.

Subnet Mask: **16**

» Next

Modifier le mot de passe admin

Wizard / pfSense Setup / Set Admin WebGUI Password

Step 6 of 9

Set Admin WebGUI Password

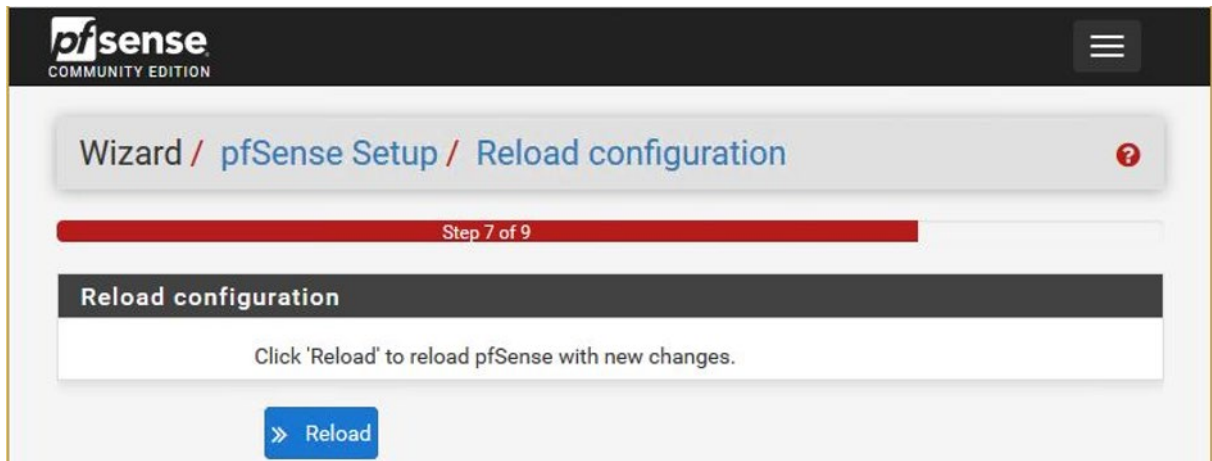
On this screen the admin password will be set, which is used to access the WebGUI and also SSH services if enabled.

Admin Password: [masked]

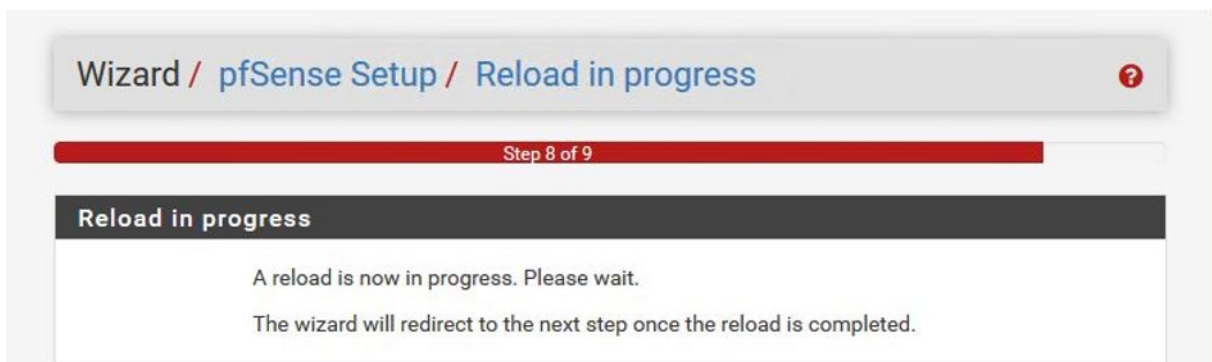
Admin Password AGAIN: [masked]

» Next

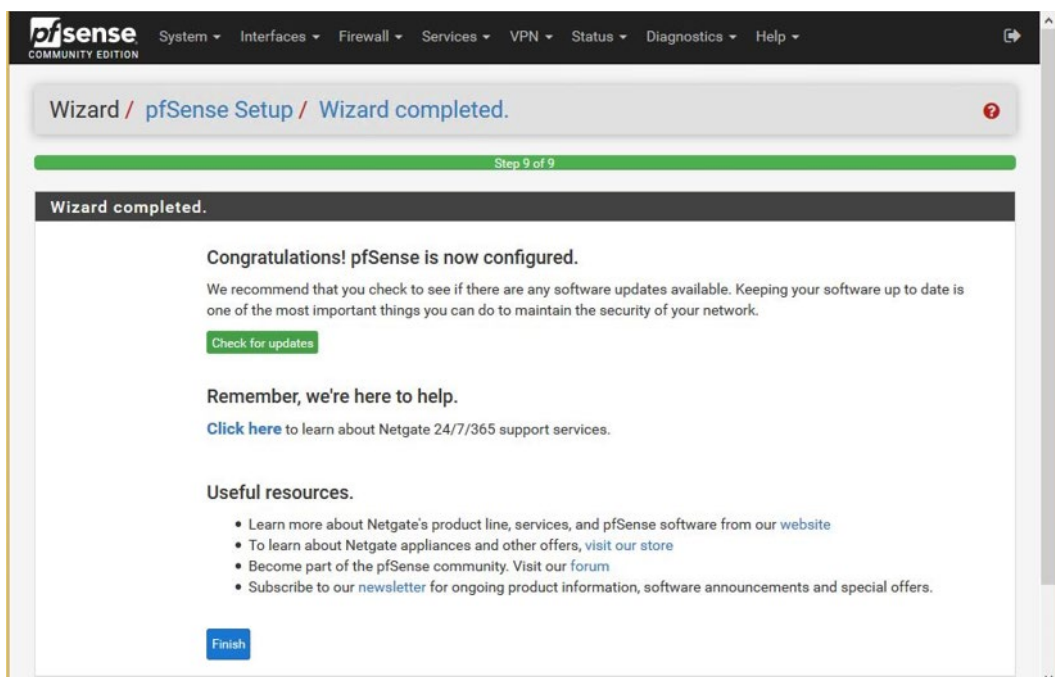
Cliquer sur : Reload



Patiencez ...



Sélectionner : Finish



Accepter la licence

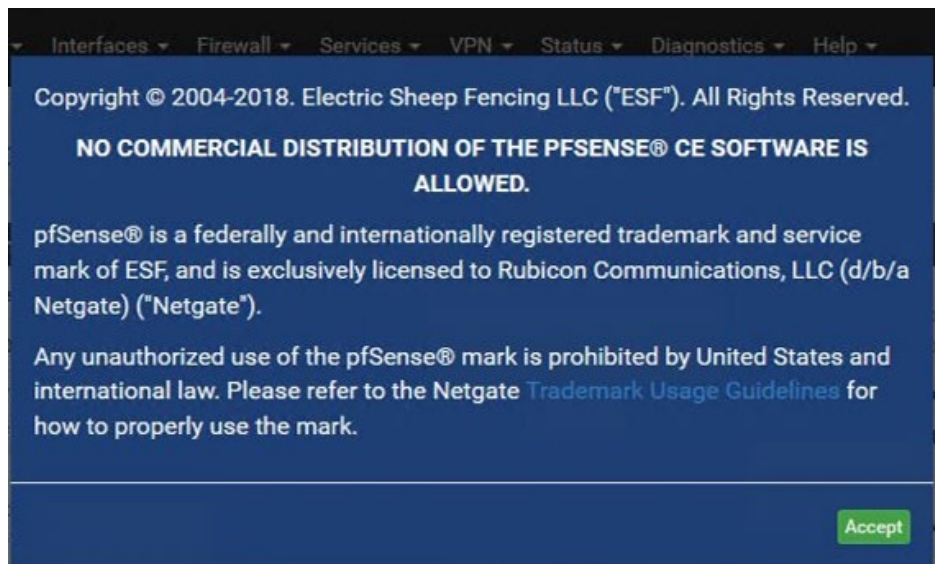
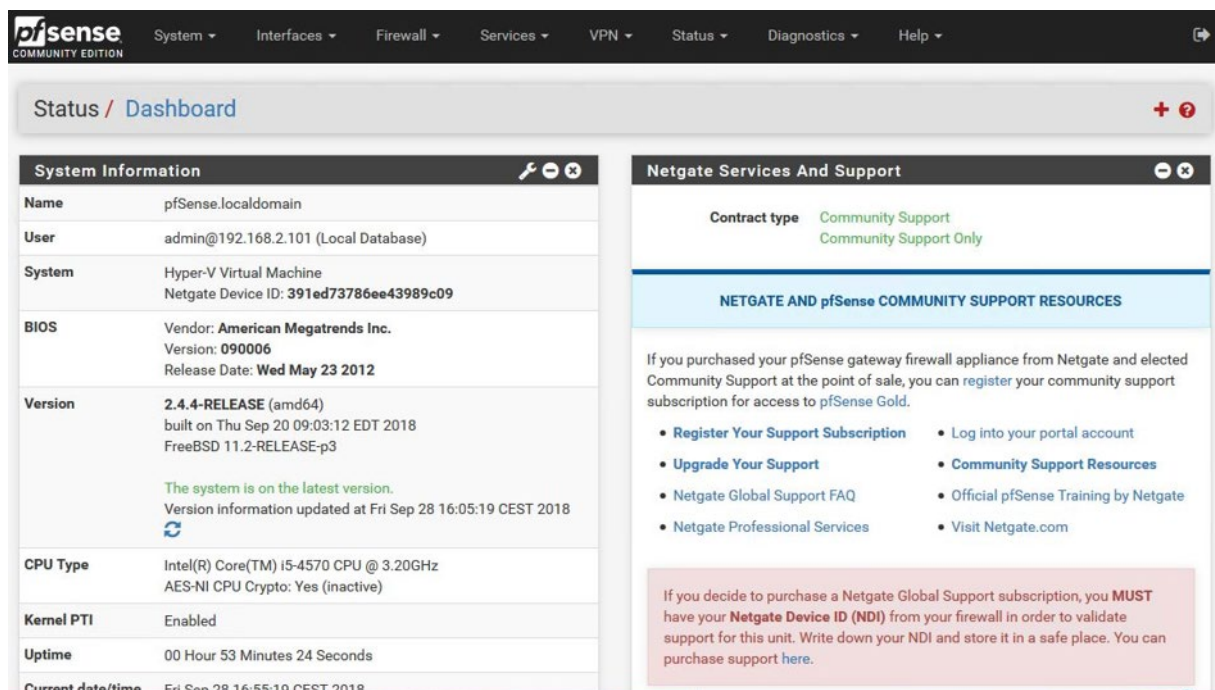


Tableau de bord de pfSense



Fin d'installation