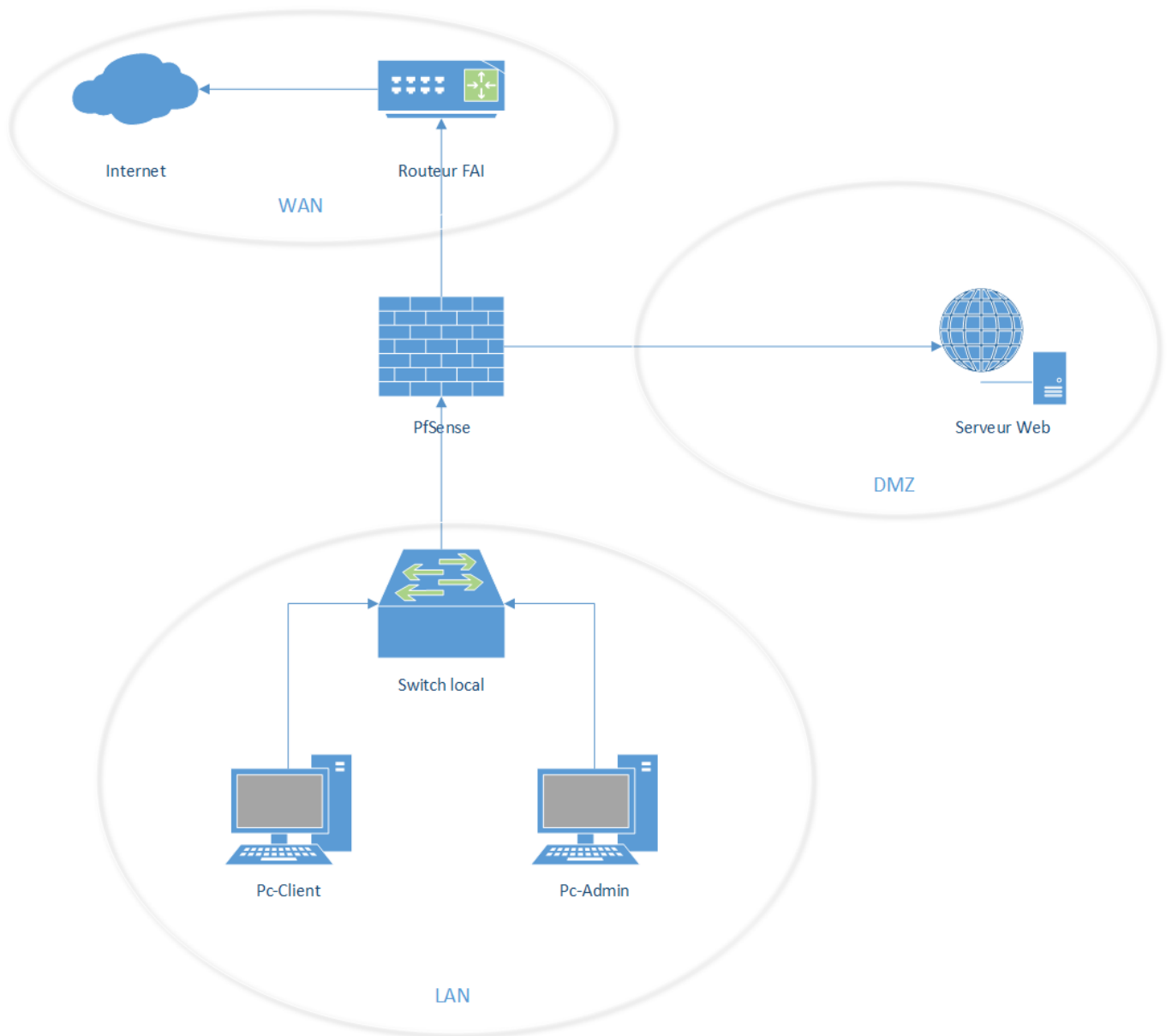


# Configuration LAN et DMZ sous PfSense



Nous allons mettre en place un serveur PfSense avec une partie LAN qui va contenir un client et un poste admin.

Une partie DMZ qui va contenir un serveur WEB sous apache2

Et la partie WAN qui sera relié au réseau NAT de notre VmWare.

## Configurer votre serveur PfSense sous VMware pour avoir les 3 carte réseaux

Hardware Options

Device	Summary
Memory	1 GB
Processors	1
Hard Disk (SCSI)	20 GB
CD/DVD (IDE)	Auto detect
Network Adapter	NAT
Network Adapter 2	Custom (VMnet1)
Network Adapter 3	Custom (VMnet2)
Display	Auto detect

Memory

Specify the amount of memory allocated to this virtual machine. The memory size must be a multiple of 4 MB.

Memory for this virtual machine: 1024 MB

64 GB -  
32 GB -  
16 GB -  
8 GB -  
4 GB -  
2 GB -  
1 GB -  
512 MB -  
256 MB -  
128 MB -  
64 MB -  
32 MB -  
16 MB -  
8 MB -  
4 MB -

Maximum recommended memory  
(Memory swapping may occur beyond this size.)  
13784 MB

Recommended memory  
384 MB

Guest OS recommended minimum  
32 MB

Add... Remove

Démarrer ensuite votre serveur jusqu'à voir apparaitre la console de configuration principal de votre serveur PfSense :

```
Generating RRD graphs...done.
Starting syslog...done.
Starting CRON... done.
pfSense (pfSense) 2.3.2-RELEASE amd64 Tue Jul 19 12:44:43 CDT 2016
Bootup complete

FreeBSD/amd64 (pfSense.localdomain) (ttyv0)

*** Welcome to pfSense 2.3.2-RELEASE (amd64 full-install) on pfSense ***

WAN (wan)      -> em0      ->
LAN (lan)      -> em1      ->

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: █
```

Entrer ici l'option numéro 1 pour assignés 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: 1

Valid interfaces are:

```

em0    00:0c:29:e6:7b:1f    (up) Intel(R) PRO/1000 Legacy Network Connection 1.1.
em1    00:0c:29:e6:7b:0b    (up) Intel(R) PRO/1000 Legacy Network Connection 1.1.
em2    00:0c:29:e6:7b:15    (down) Intel(R) PRO/1000 Legacy Network Connection 1.1.

```

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]? █

Nous n'aborderons pas l'implémentation des Vlans avec PfSense dans ce tutorial donc choisir l'option « n ».

Valid interfaces are:

```

em0    00:0c:29:e6:7b:1f    (up) Intel(R) PRO/1000 Legacy Network Connection 1.1.
em1    00:0c:29:e6:7b:0b    (up) Intel(R) PRO/1000 Legacy Network Connection 1.1.
em2    00:0c:29:e6:7b:15    (down) Intel(R) PRO/1000 Legacy Network Connection 1.1.

```

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

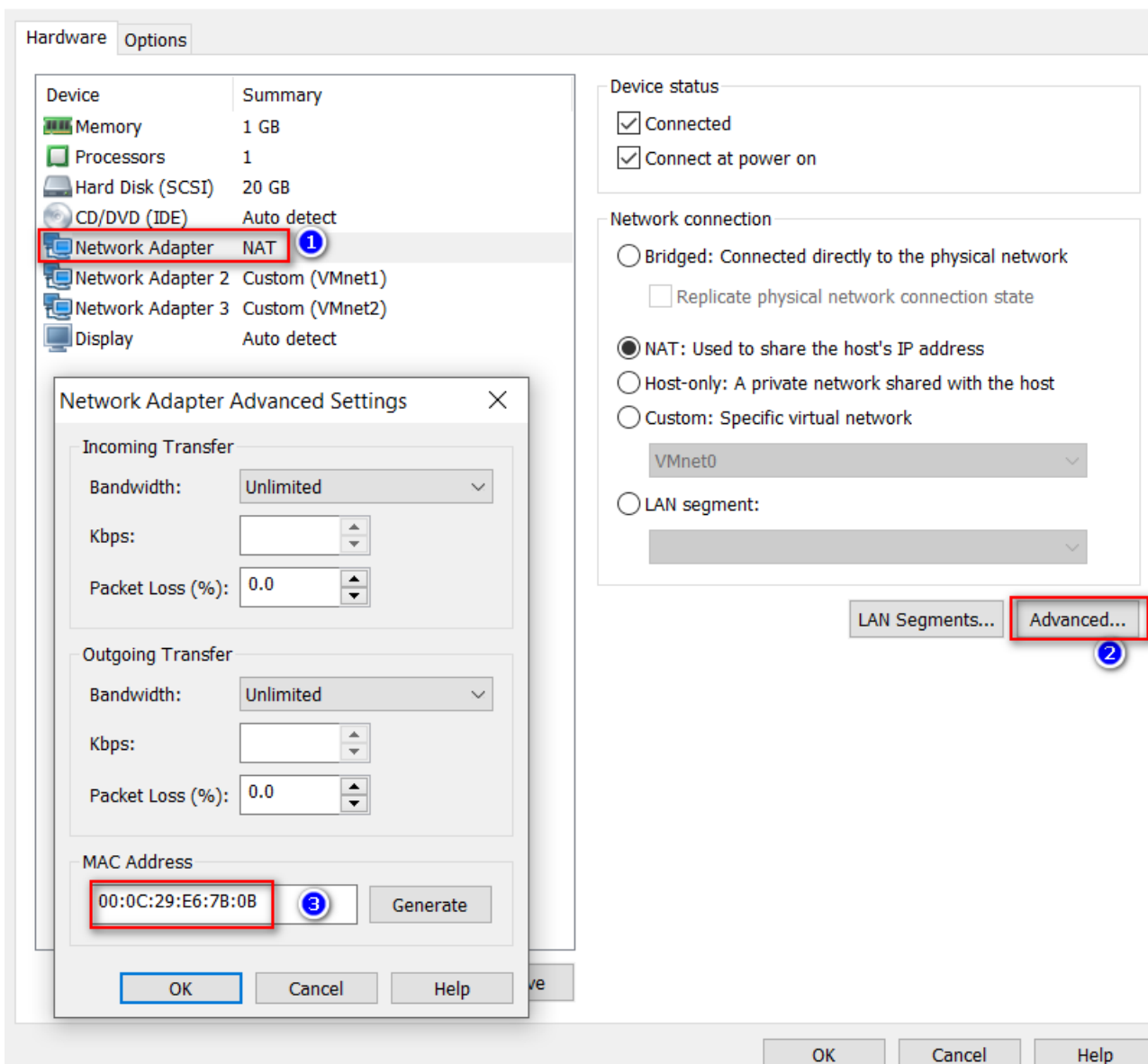
If the names of the interfaces are not known, auto-detection can be used instead. To use auto-detection, please disconnect all interfaces before pressing 'a' to begin the process.

Enter the WAN interface name or 'a' for auto-detection  
(em0 em1 em2 or a): █

Sur cette console nous devons indiquer à notre serveur quelle carte correspond à quelle interface de PfSense.

La première question porte sur l'interface WAN observer les adresse mac de chaque interfaces em0, em1 et em2.

Nous allons vérifier ces adresse mac sous VMware dans la configuration de la machine.



Comme nous pouvons le voir sur la capture d'écran l'adresse mac 00:0C:29:E6:7B:0B appartient à l'interface NAT de notre topologie qui correspond à la partie WAN de notre architecture.

Je vais donc choisir « **em1** » pour la partie **WAN**.

```
Valid interfaces are:

em0    00:0c:29:e6:7b:1f  (up) Intel(R) PRO/1000 Legacy Network Connection 1.1.
em1    00:0c:29:e6:7b:0b  (up) Intel(R) PRO/1000 Legacy Network Connection 1.1.
em2    00:0c:29:e6:7b:15  (down) Intel(R) PRO/1000 Legacy Network Connection 1.1.

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
(em0 em1 em2 or a): em1
```

La prochaine question porte sur l'interface **LAN** donc vérifier l'adresse mac de votre interface LAN et donner le nom correspondant pour ma topologie c'est **em2**.

```

Valid interfaces are:

em0      00:0c:29:e6:7b:1f   (up) Intel(R) PRO/1000 Legacy Network Connection 1.1.
em1      00:0c:29:e6:7b:0b   (up) Intel(R) PRO/1000 Legacy Network Connection 1.1.
em2      00:0c:29:e6:7b:15   (down) Intel(R) PRO/1000 Legacy Network Connection 1.1.

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
(em0 em1 em2 or a): em1

Enter the LAN interface name or 'a' for auto-detection
NOTE: this enables full Firewalling/NAT mode.
(em0 em2 a or nothing if finished): em2

```

La prochaine question porte sur l'interface Optional 1 qui va correspondre à notre « **DMZ** » donc je donne la dernière interface qui est « **em0** ».

```

em0      00:0c:29:e6:7b:1f   (up) Intel(R) PRO/1000 Legacy Network Connection 1.1.
em1      00:0c:29:e6:7b:0b   (up) Intel(R) PRO/1000 Legacy Network Connection 1.1.
em2      00:0c:29:e6:7b:15   (down) Intel(R) PRO/1000 Legacy Network Connection 1.1.

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
(em0 em1 em2 or a): em1

Enter the LAN interface name or 'a' for auto-detection
NOTE: this enables full Firewalling/NAT mode.
(em0 em2 a or nothing if finished): em2

Enter the Optional 1 interface name or 'a' for auto-detection
(em0 a or nothing if finished): em0

```

PfSense vous demande s'il y a une autre interface à déclarer nous avons fini donc appuyer sur « Entrer ».

```

Enter the WAN interface name or 'a' for auto-detection
(em0 em1 em2 or a): em1

Enter the LAN interface name or 'a' for auto-detection
NOTE: this enables full Firewalling/NAT mode.
(em0 em2 a or nothing if finished): em2

Enter the Optional 1 interface name or 'a' for auto-detection
(em0 a or nothing if finished): em0

Enter the Optional 2 interface name or 'a' for auto-detection
( a or nothing if finished):

```

Confirmer l'assignation des interfaces ici par un « **y** ».

```

The interfaces will be assigned as follows:

WAN    -> em1
LAN    -> em2
OPT1   -> em0

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

```

Nous sommes à présent revenue sur la console principale de PfSense.

```
*** Welcome to pfSense 2.3.2-RELEASE (amd64 full-install) on pfSense ***

WAN (wan)      -> em1      -> v4/DHCP4: 192.168.99.201/24
LAN (lan)      -> em2      ->
OPT1 (opt1)    -> em0      ->

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: █
```

Entrer l'option « 2 » pour attribuer des adresse IP à nos 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

Available interfaces:

1 - WAN (em1 - dhcp, dhcp6)
2 - LAN (em2)
3 - OPT1 (em0)

Enter the number of the interface you wish to configure: 1█
```

Je vais tout d'abord configurer l'adresse IP en statique pour l'interface WAN qui est actuellement en DHCP avec l'option « 1 ».

```
Available interfaces:

1 - WAN (em1 - dhcp, dhcp6)
2 - LAN (em2)
3 - OPT1 (em0)

Enter the number of the interface you wish to configure: 1

Configure IPv4 address WAN interface via DHCP? (y/n) n█
```

Nous allons répondre « n » pour la configuration dynamique de l'adresse IP.

Et je donne l'adresse IP de mon interface WAN.

```
Enter the new WAN IPv4 address. Press <ENTER> for none:
> 192.168.99.200█
```

Et son masque : /24

```
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 WAN IPv4 subnet bit count (1 to 31):
> 24█
```

Nous configurons une interface WAN donc je dois donner une adresse IP pour la passerelle. Ici la passerelle sera VMware.

```
For a WAN, enter the new WAN IPv4 upstream gateway address.  
For a LAN, press <ENTER> for none:  
> 192.168.99.2
```

Nous n'avons pas besoin d'ipv4 donc je réponds non pour sa configuration dynamique.

```
Configure IPv6 address WAN interface via DHCP6? (y/n) n
```

Appuyer sur « **entrer** » pour ne pas configurer l'ipv6.

```
Configure IPv6 address WAN interface via DHCP6? (y/n) n  
  
Enter the new WAN IPv6 address. Press <ENTER> for none:  
>
```

Ici PfSense nous demande s'il doit activer le protocole http a la place https qui est sécuriser pour la configuration via l'interface web répondez « **n** ».

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

Appuyer sur « **Entrer** ».

Nous allons à présent configurer l'interface LAN : (Option 2 depuis la console principale)

```
Enter an option: 2  
  
Available interfaces:  
  
1 - WAN (em1 - static)  
2 - LAN (em2)  
3 - OPT1 (em0)  
  
Enter the number of the interface you wish to configure: 2  
  
Enter the new LAN IPv4 address. Press <ENTER> for none:  
> 192.168.10.200  
  
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):  
> 24  
  
For a WAN, enter the new WAN IPv4 upstream gateway address.  
For a LAN, press <ENTER> for none:  
>
```

Remarque : Pour la passerelle nous sommes sur l'interface LAN pas de Gateway à déclarer.

Pas d'adresse IPV6.

```
Enter the new LAN IPv6 address. Press <ENTER> for none:  
>  
  
Do you want to enable the DHCP server on LAN? (y/n) y
```

Nous allons demander à notre serveur PfSense de distribuer des adresse IP dans notre LAN.

Remarque : Penser au préalable à désactiver le serveur DHCP de votre carte VMNET1 et VMNET2 depuis « **Virtual Network Editor...** »

Name	Type	External Connection	Host Connection	DHCP	Subnet Address
VMnet1	Host-only	1	Connected	-	192.168.10.0
VMnet2	Host-only	-	Connected	-	192.168.20.0
VMnet3	Host-only	-	Connected	-	192.168.30.0
VMnet4	Host-only	-	Connected	-	192.168.84.0
VMnet8	NAT	NAT	Connected	Enabled	192.168.99.0

VMnet Information

☐ Bridged (connect VMs directly to the external network)

Bridged to:  Automatic Settings...

☐ NAT (shared host's IP address with VMs) NAT Settings...

☒ Host-only (connect VMs internally in a private network)

☒ Connect a host virtual adapter to this network

Host virtual adapter name: VMware Network Adapter VMnet1

☐ Use local DHCP service to distribute IP address to VMs 2 DHCP Settings...

Subnet IP: 192.168.10.0 Subnet mask: 255.255.255.0

⚠ Administrator privileges are required to modify the network configuration. Change Settings

Restore Defaults OK Cancel Apply Help

Entrer la plage que notre serveur DHCP doit servir, désactiver le http avec l'option « n » et appuyer sur **entrer**.

```
Do you want to enable the DHCP server on LAN? (y/n) y
Enter the start address of the IPv4 client address range: 192.168.10.10 1
Enter the end address of the IPv4 client address range: 192.168.10.100 2
Disabling IPv6 DHCPD...
Do you want to revert to HTTP as the webConfigurator protocol? (y/n) n 3

Please wait while the changes are saved to LAN...
Reloading filter...
Reloading routing configuration...
DHCPD...

The IPv4 LAN address has been set to 192.168.10.200/24
You can now access the webConfigurator by opening the following URL in your web
browser:
    https://192.168.10.200/

Press <ENTER> to continue. 4
```



Notez que PfSense nous informe que nous pouvons accéder à la console de gestion via le protocole https depuis n'importe quelle machine dans le réseau « **LAN** ».

```
The IPv4 LAN address has been set to 192.168.10.200/24
You can now access the webConfigurator by opening the following URL in your web
browser:
```

```
https://192.168.10.200/
```

```
Press <ENTER> to continue.
```

```
*** Welcome to pfSense 2.3.2-RELEASE (amd64 full-install) on pfSense ***
```

```
WAN (wan)      -> em1      -> v4: 192.168.99.200/24
LAN (lan)      -> em2      -> v4: 192.168.10.200/24
OPT1 (opt1)    -> em0      ->
```

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

```
Enter an option: █
```

Avons d'aller sur la console WEB de notre serveur configurons la dernière interface « **DMZ** ».

```
1 - WAN (em1 - static)
2 - LAN (em2 - static)
3 - OPT1 (em0)
```

```
Enter the number of the interface you wish to configure: 3 ①
```

```
Enter the new OPT1 IPv4 address. Press <ENTER> for none:
```

```
> 192.168.20.200 ②
```

```
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 OPT1 IPv4 subnet bit count (1 to 31):
```

```
> 24 ③
```

```
For a WAN, enter the new OPT1 IPv4 upstream gateway address.
```

```
For a LAN, press <ENTER> for none:
```

```
>
```

```
Enter the new OPT1 IPv6 address. Press <ENTER> for none:
```

```
>
```

```
Do you want to enable the DHCP server on OPT1? (y/n) n ④
```

Remarque : Pour notre DMZ je n'ai pas besoin de serveur DHCP donc je choisi l'option « **n** »

Nous renommerons **OPT1** par **DMZ** depuis notre console WEB plus tard.

Nous avons terminé la configuration des interfaces de notre PfSense. La suite sera de configurer les règles de communication entre ces interfaces pour mettre en place notre architecture WAN -----PfSense-----LAN

DMZ

```
Reloading filter...
Reloading routing configuration...
DHCPD...

The IPv4 OPT1 address has been set to 192.168.20.200/24

Press <ENTER> to continue.
*** Welcome to pfSense 2.3.2-RELEASE (amd64 full-install) on pfSense ***

WAN (wan)      -> em1      -> v4: 192.168.99.200/24
LAN (lan)      -> em2      -> v4: 192.168.10.200/24
OPT1 (opt1)    -> em0      -> v4: 192.168.20.200/24

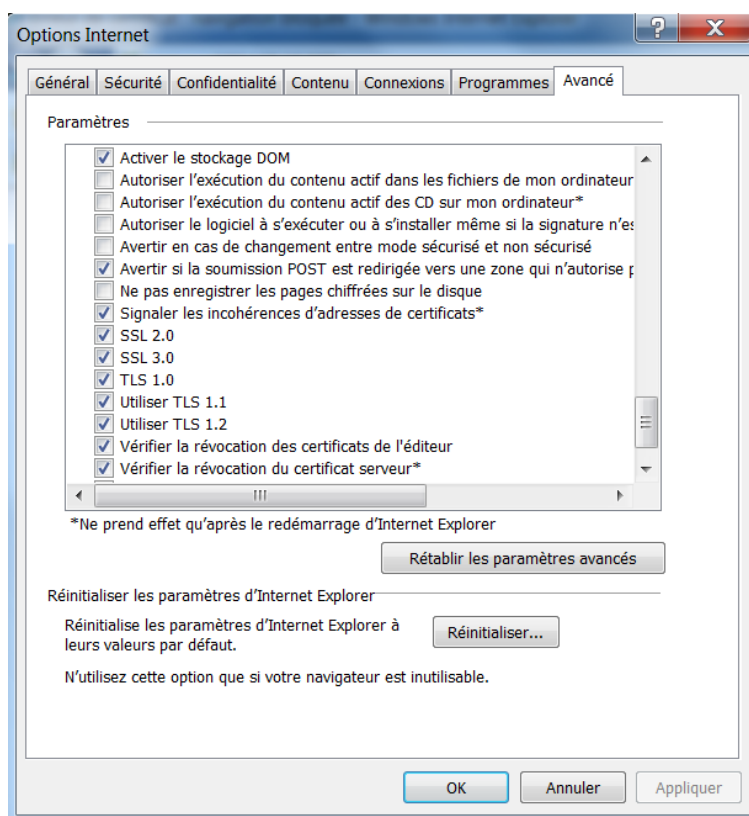
0) Logout (SSH only)          9) pfTop
1) Assign Interfaces          10) Filter Logs
2) Set interface(s) IP address 11) Restart webConfigurator
3) Reset webConfigurator password 12) PHP shell + pfSense tools
4) Reset to factory defaults  13) Update from console
5) Reboot system              14) Enable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

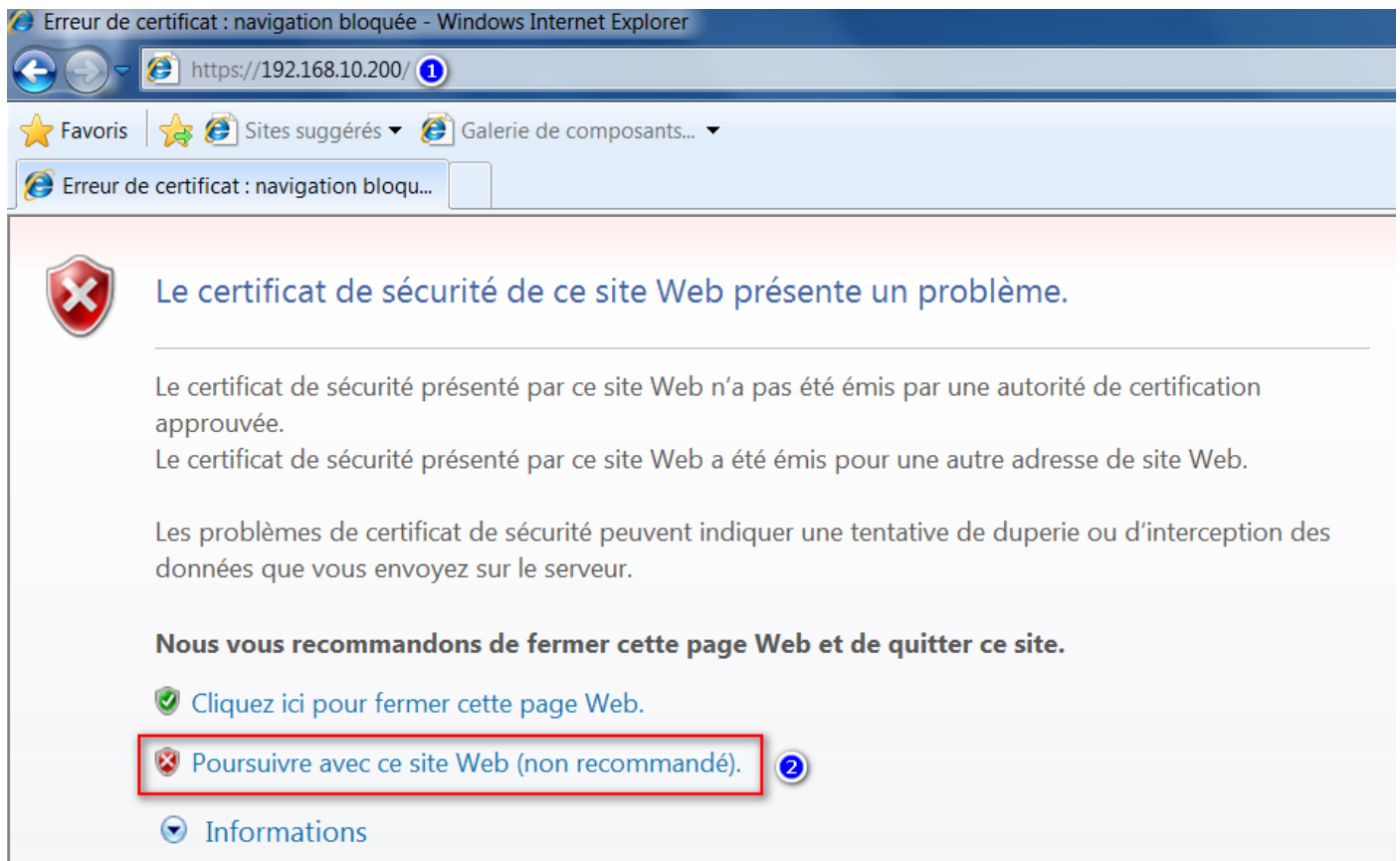
Enter an option: █
```

Démarrer une machine cliente par exemple Windows 7 connecter au réseau VMNET1.

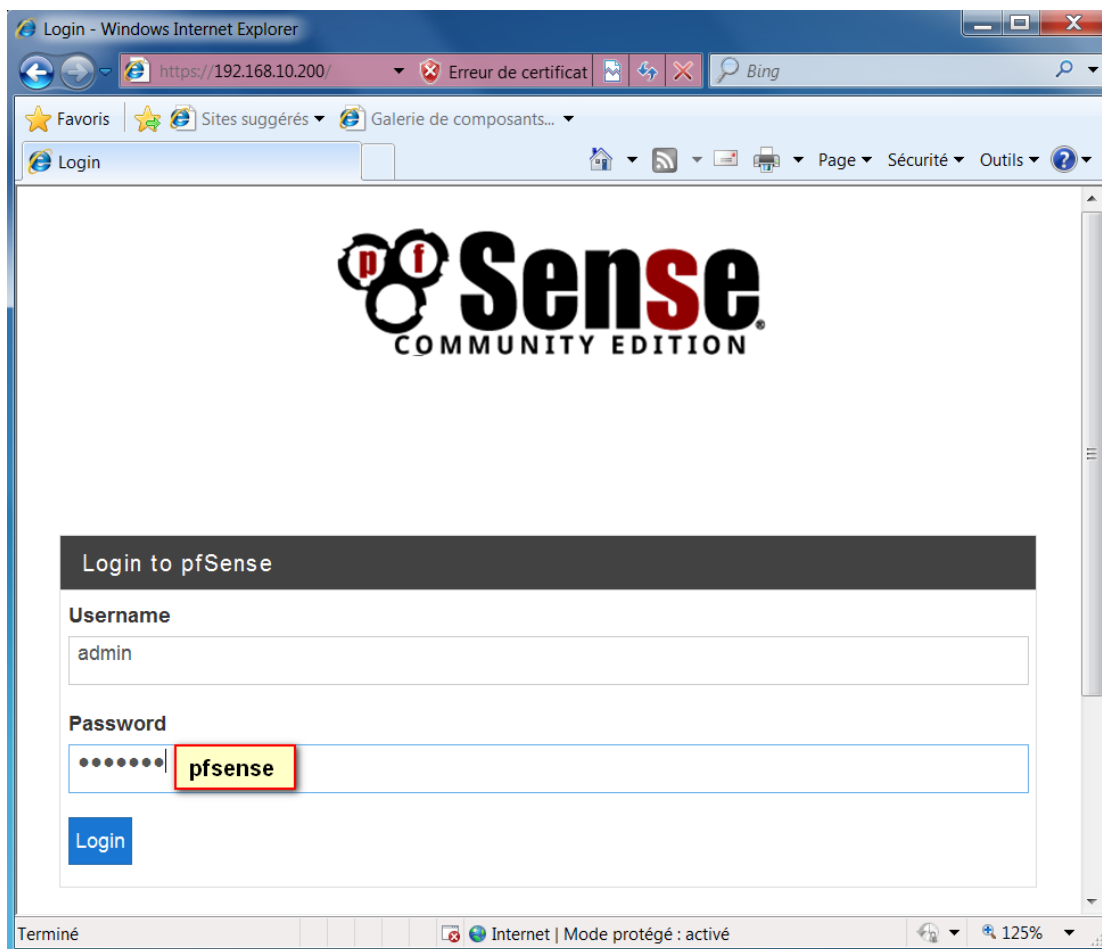
Et lancer le navigateur web et entrer l'adresse : <https://192.168.10.200>

**Remarque** : si vous n'arrivez pas à afficher la page avec internet explorer vérifier dans « Outils » => « Option internet » => « Avancé » que SSL 2.0 et TLS 1.1 sont activé.





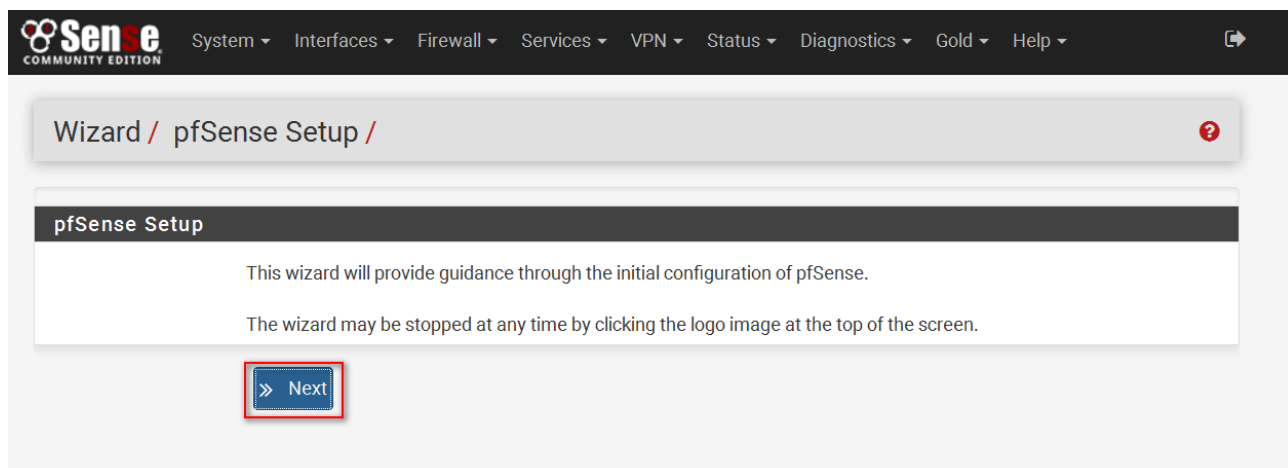
Poursuivre car nous n'avons pas de certificat qui provient d'une autorité de certification racine.



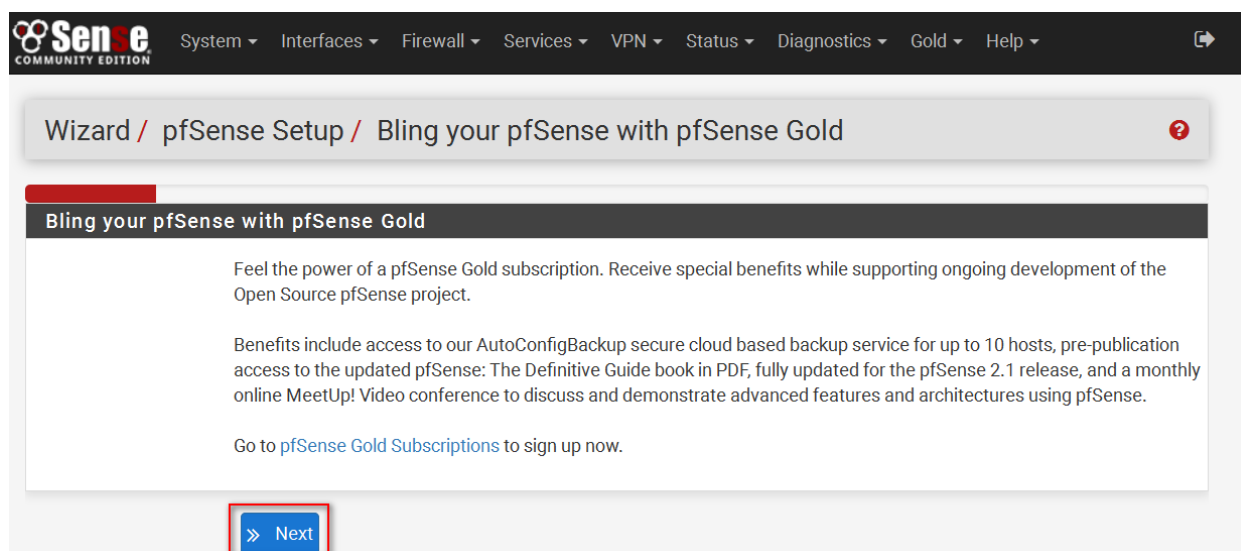
Le login est « **admin** » et le mot de passe « **pfsense** ».

Je vais poursuivre la configuration WEB avec Mozilla Firefox.

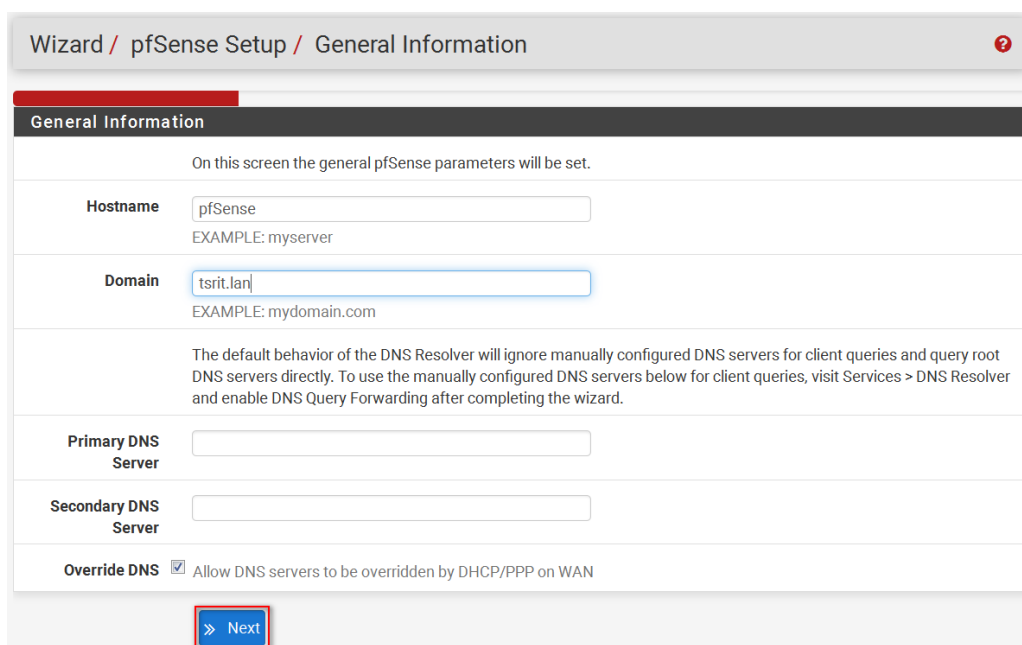
A la première connexion sur notre serveur PfSense nous avons le « **setup wizard** » qui est exécuté.



Vous pouvez vous inscrire à PfSense GOLD pour avoir un support depuis l'équipe technique de PfSense. Nous allons faire « **next** ».



Si vous avez un serveur DNS dans l'entreprise vous pouvez le renseigner ici, sino laisser les champs vides car notre serveur PfSense intègre un serveur DNS nativement.



Cette fenêtre demande le serveur de temps avec lequel vous voulez synchroniser votre serveur et la zone.

Wizard / pfSense Setup / Time Server Information ?

---

**Time Server Information**

Please enter the time, date and time zone.

<b>Time server hostname</b>	<input type="text" value="0.pfsense.pool.ntp.org"/>
Enter the hostname (FQDN) of the time server.	
<b>Timezone</b>	<input type="text" value="Europe/Paris"/>

[» Next](#)

La prochaine étape vous demande de vérifier ou reconfigurer l'interface **WAN** :

Si vous avez correctement configuré l'interface via le Shell de notre serveur PfSense allez à la fin de la page et cliquez sur [» Next](#).

Vérifier l'adresse IP de votre LAN et appuyer sur « **Next** »

Wizard / pfSense Setup / Configure LAN Interface ?

---

**Configure LAN Interface**

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

<b>LAN IP Address</b>	<input type="text" value="192.168.10.200"/>
Type dhcp if this interface uses DHCP to obtain its IP address.	
<b>Subnet Mask</b>	<input type="text" value="24"/>

[» Next](#)

Ici nous allons changer le mot de passe « **pfsense** » de notre interface web par un nouveau mot de passe.

Wizard / pfSense Setup / Set Admin WebGUI Password ?

---

**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.

<b>Admin Password</b>	<input type="password" value="••••••••"/> ①
<b>Admin Password AGAIN</b>	<input type="password" value="••••••••"/> ②

[» Next](#) ③

Cliquer enfin sur « Reload » pour valider les changements.

Wizard / pfSense Setup / Reload configuration ?

Reload configuration

Click 'Reload' to reload pfSense with new changes.

[» Reload](#)

Cliquer sur « **here** » pour continuer

Wizard / pfSense Setup / Wizard completed. ?


Wizard completed.

Congratulations! pfSense is now configured.  
Please consider contributing back to the project!

Click [here](#) to purchase services offered by the pfSense team and find other ways to contribute.

Click [here](#) to continue on to pfSense webConfigurator.

Vous avez la page principale de configuration de votre serveur PfSense.




 System ▾ Interfaces ▾ Firewall ▾ Services ▾ VPN ▾ Status ▾ Diagnostics ▾ Gold ▾ Help ▾ 🔗

Status / Dashboard + ?

System Information ⊖ ⊗

Name	pfSense.tsrit.lan
Version	2.3.2-RELEASE (amd64) built on Tue Jul 19 12:44:43 CDT 2016 FreeBSD 10.3-RELEASE-p5  Obtaining update status ⚙
Platform	pfSense
CPU Type	Intel(R) Core(TM) i7-6700K CPU @ 4.00GHz
Uptime	01 Hour 41 Minutes 44 Seconds
Current date/time	Sun Nov 6 14:33:12 CET 2016
DNS server(s)	• 127.0.0.1
Last config change	Sun Nov 6 14:32:00 CET 2016
State table size	<div>0% (51/98000)</div> <a href="#">Show states</a>

Interfaces ⊖ ⊗

 WAN	↑	1000baseT <full-duplex>	192.168.99.200
 LAN	↑	1000baseT <full-duplex>	192.168.10.200
 OPT1	↑	1000baseT <full-duplex>	192.168.20.200

Nous allons changer le nom de interface OPT1 par DMZ, pour cela faites comme sur la capture d'écran :

The screenshot shows the pfSense web interface. At the top, the 'Interfaces' menu is open, with 'OPT1' highlighted. Below the menu, the 'System Information' panel shows details about the pfSense system. To the right, the 'Interfaces' table lists the configured interfaces: WAN, LAN, and OPT1. The 'OPT1' interface is currently named 'OPT1'.

Name	Version	Platform
pfSense.tsrit.lan	2.3.2-RELEASE (amd64) built on Tue Jul 19 12:44:43 CDT 2016 FreeBSD 10.3-RELEASE-p5	pfSense

Interface	Speed	Duplex	IP Address
WAN	1000baseT	<full-duplex>	192.168.99.200
LAN	1000baseT	<full-duplex>	192.168.10.200
OPT1	1000baseT	<full-duplex>	192.168.20.200

Puis modifier dans le champ « Description » OPT1 par DMZ.

The screenshot shows the 'Interfaces / OPT1' configuration page. The 'General Configuration' section is visible, with the 'Description' field set to 'DMZ'. The 'IPv4 Configuration Type' is set to 'Static IPv4' and the 'IPv6 Configuration Type' is set to 'None'.

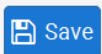
**General Configuration**

**Enable** ☒ Enable interface

**Description**   
Enter a description (name) for the interface here.

**IPv4 Configuration Type**

**IPv6 Configuration Type**

Puis cliquer en bas de la page : 

Remarque : A chaque modification effectuer sur la console WEB il faut soit penser à appliquer les changements à chaque modification ou à la fin de toutes les modifications via le champ qui apparait en haut de votre page de configuration PfSense :

The screenshot shows a notification bar with the following text: 'The DMZ configuration has been changed. The changes must be applied to take effect. Don't forget to adjust the DHCP Server range if needed after applying.' A green 'Apply Changes' button is visible on the right.

The DMZ configuration has been changed.  
The changes must be applied to take effect.  
Don't forget to adjust the DHCP Server range if needed after applying.

☒ Apply Changes



Cliquer sur le logo de PfSense pour revenir a la page principale et remarquer le changement de nom de votre interface opt1 par DMZ :

The screenshot shows the 'Interfaces' table after the configuration change. The 'OPT1' interface has been renamed to 'DMZ'.

Interface	Speed	Duplex	IP Address
WAN	1000baseT	<full-duplex>	192.168.99.200
LAN	1000baseT	<full-duplex>	192.168.10.200
DMZ	1000baseT	<full-duplex>	192.168.20.200