

TP PF Sense

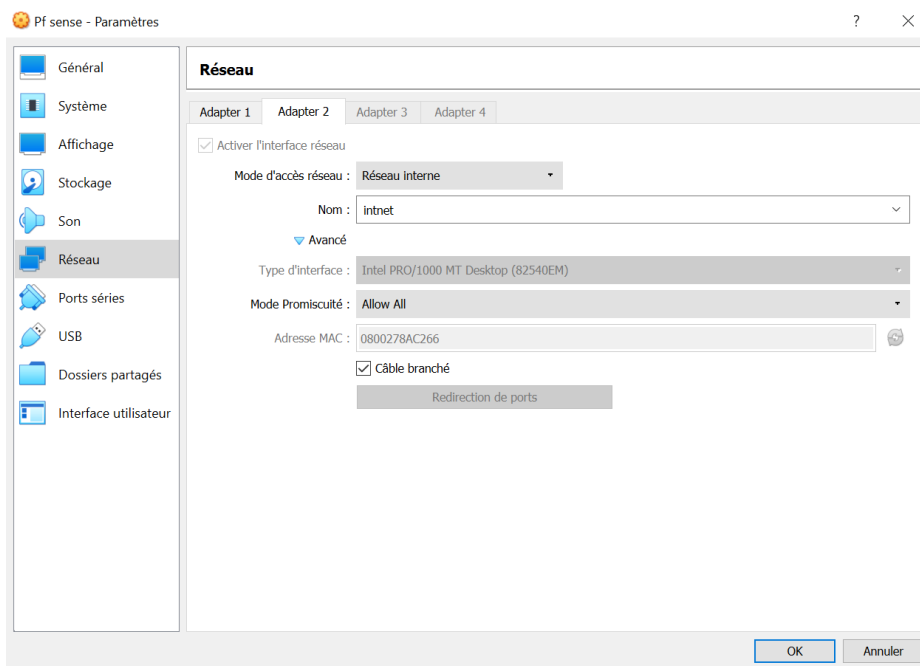
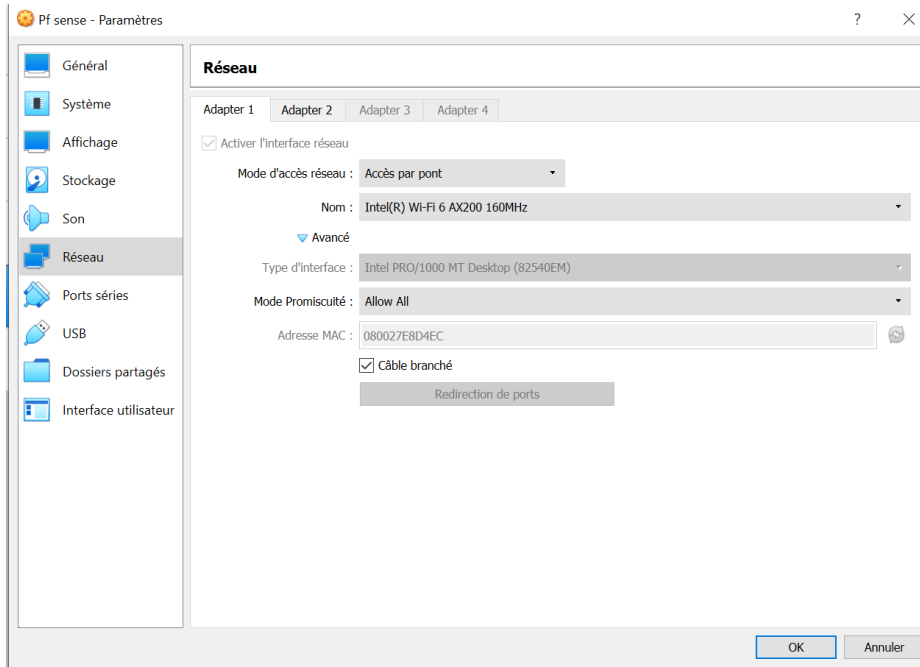
Sommaire:

- 1- Installation, configuration et paramétrage de Pf sense
- 2- Connexion à Pf Sense
- 3- Deny all
- 4- Ouverture des accès pour accéder à internet
- 5- Captive Portal

1- Installation, configuration et paramétrage

Tuto youtube : https://www.youtube.com/watch?v=dEhDXiLQsj8&ab_channel=NadhirHAMDJ

Après ce tuto, j'ai mis mes deux VM dans les bons reseaux au niveau des cartes réseaux:



Mettre une carte réseau en accès par pont et une autre en NAT pour le réseau Lan.

Lancer les VM et commencer la configuration pour l'installer :

pfSense Installer

Welcome

Welcome to pfSense!

Install	Install pfSense
Rescue Shell	Launch a shell for rescue operations
Recover config.xml	Recover config.xml from a previous install

< **OK** >

<Cancel>

pfSense Installer

Partitioning

How would you like to partition your disk?

Auto (UFS) BIOS	Guided Disk Setup using BIOS boot method
Auto (UFS) UEFI	Guided Disk Setup using UEFI boot method
Manual	Manual Disk Setup (experts)
Shell	Open a shell and partition by hand
Auto (ZFS)	Guided Root-on-ZFS

< **OK** >

<Cancel>

pfSense Installer

ZFS Configuration

Configure Options:

>>> Install	Proceed with Installation
T Pool Type/Disks:	stripe: 0 disks
- Rescan Devices	*
- Disk Info	*
N Pool Name	zroot
4 Force 4K Sectors?	YES
E Encrypt Disks?	NO
P Partition Scheme	GPT (BIOS)
S Swap Size	2g
M Mirror Swap?	NO
W Encrypt Swap?	NO

<Select> <Cancel>

Create ZFS boot pool with displayed options

pfSense Installer

ZFS Configuration

Select Virtual Device type:

stripe	Stripe - No Redundancy
mirror	Mirror - n-Way Mirroring
raid10	RAID 1+0 - n x 2-Way Mirrors
raidz1	RAID-Z1 - Single Redundant RAID
raidz2	RAID-Z2 - Double Redundant RAID
raidz3	RAID-Z3 - Triple Redundant RAID

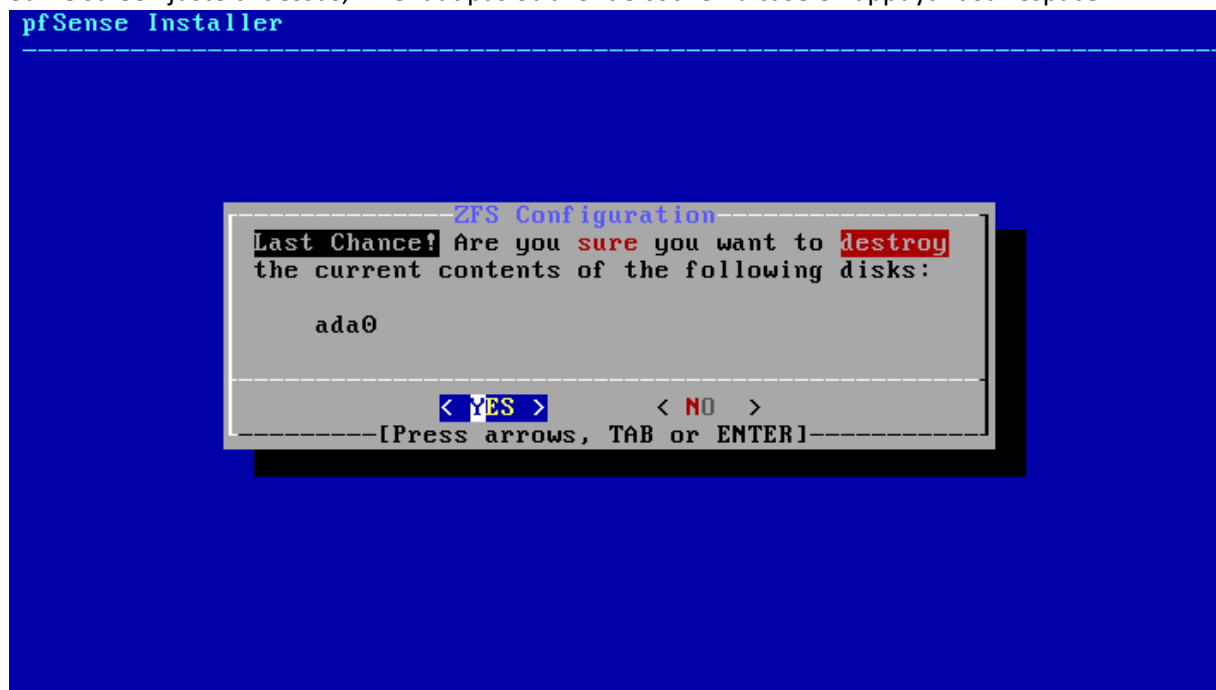
< OK > <Cancel>

[Press arrows, TAB or ENTER]

[1+ Disks] Striping provides maximum storage but no redundancy



Sur le screen juste ci-dessus, il ne faut pas oublier de cocher la case en appuyant sur espace.



pfSense Installer

Fetching Distribution

MANIFEST	[Done]
base.txz	[48%]

Fetching distribution files...

Overall Progress

48%

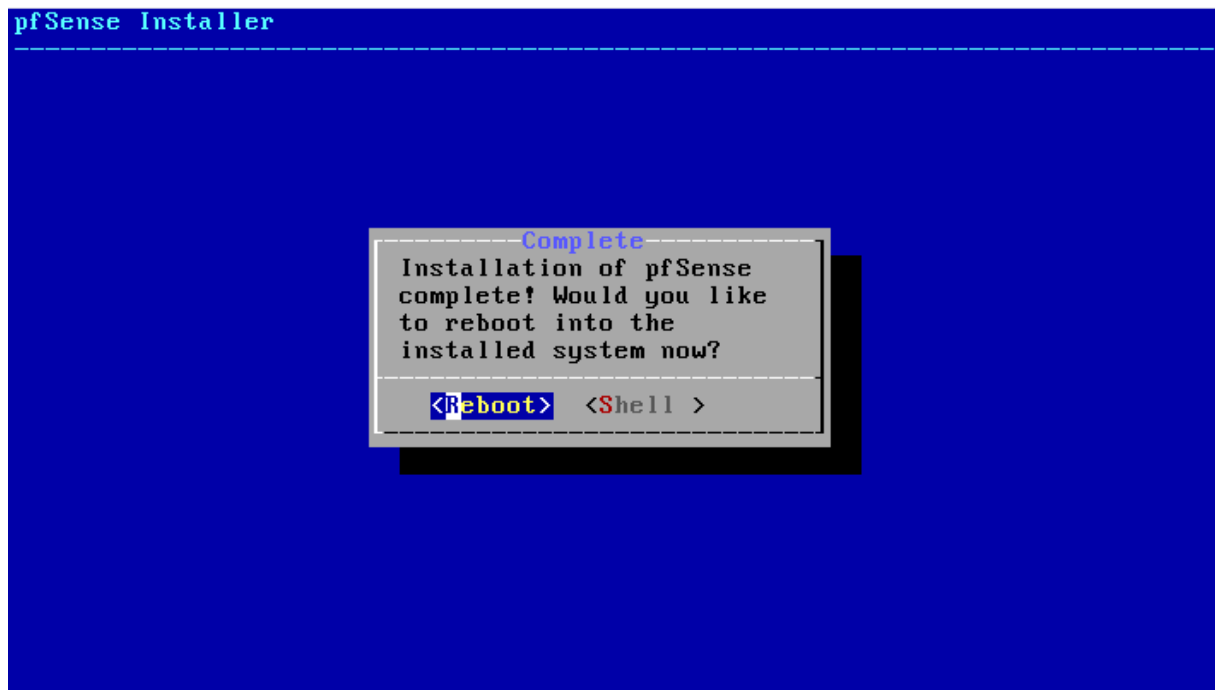
pfSense Installer

Manual Configuration

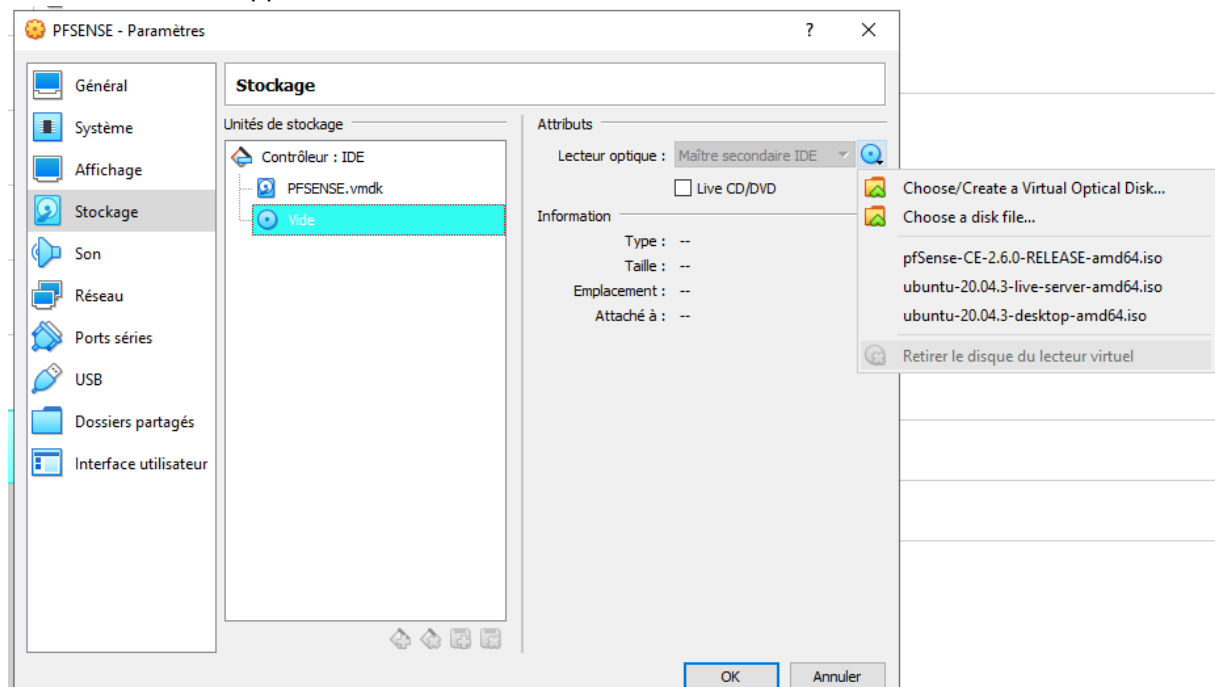
The installation is now finished.
Before exiting the installer, would
you like to open a shell in the new
system to make any final manual
modifications?

< Yes >

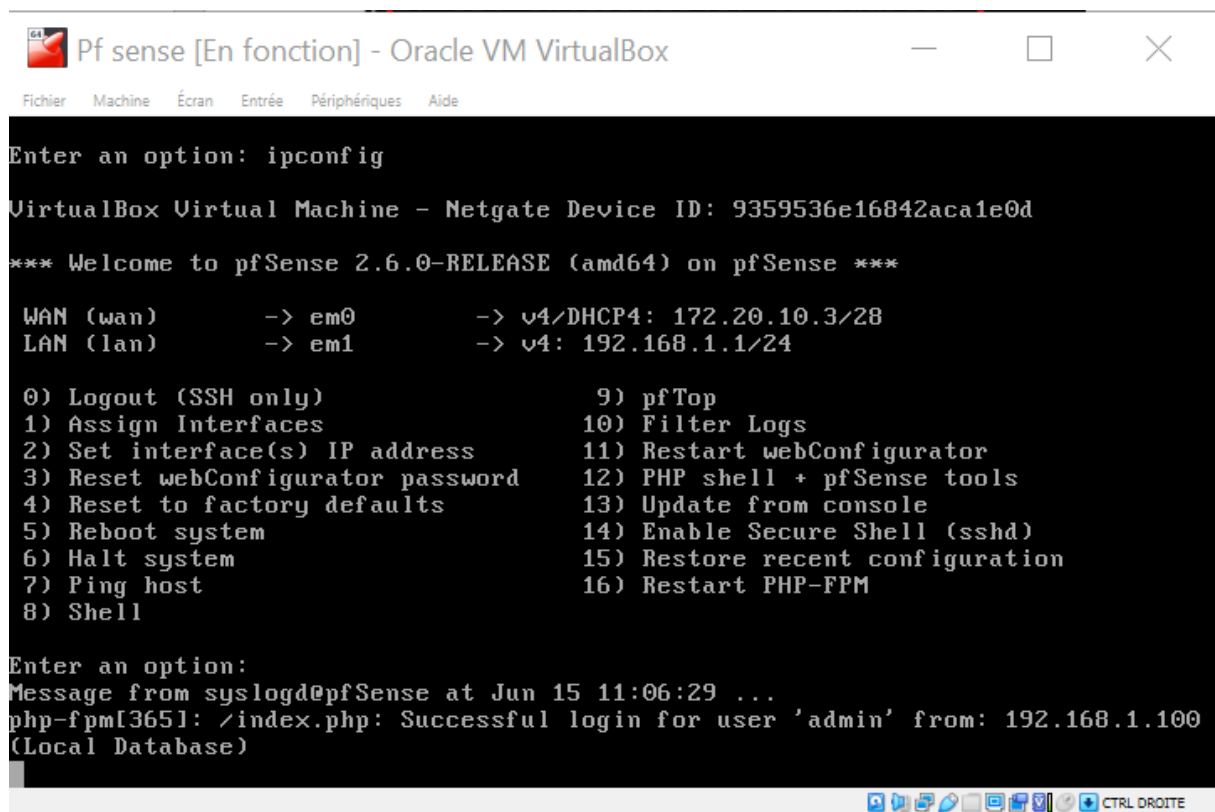
< No >



Une fois ces étapes réalisées, un message de copyright apparait et il ne faut pas aller plus loin. Il faut éteindre la VM et supprimer l'iso Pf sense :



Une fois supprimer, on réallume la VM et on va atterrir sur cette page :



```
Enter an option: ipconfig

VirtualBox Virtual Machine - Netgate Device ID: 9359536e16842aca1e0d

*** Welcome to pfSense 2.6.0-RELEASE (amd64) on pfSense ***

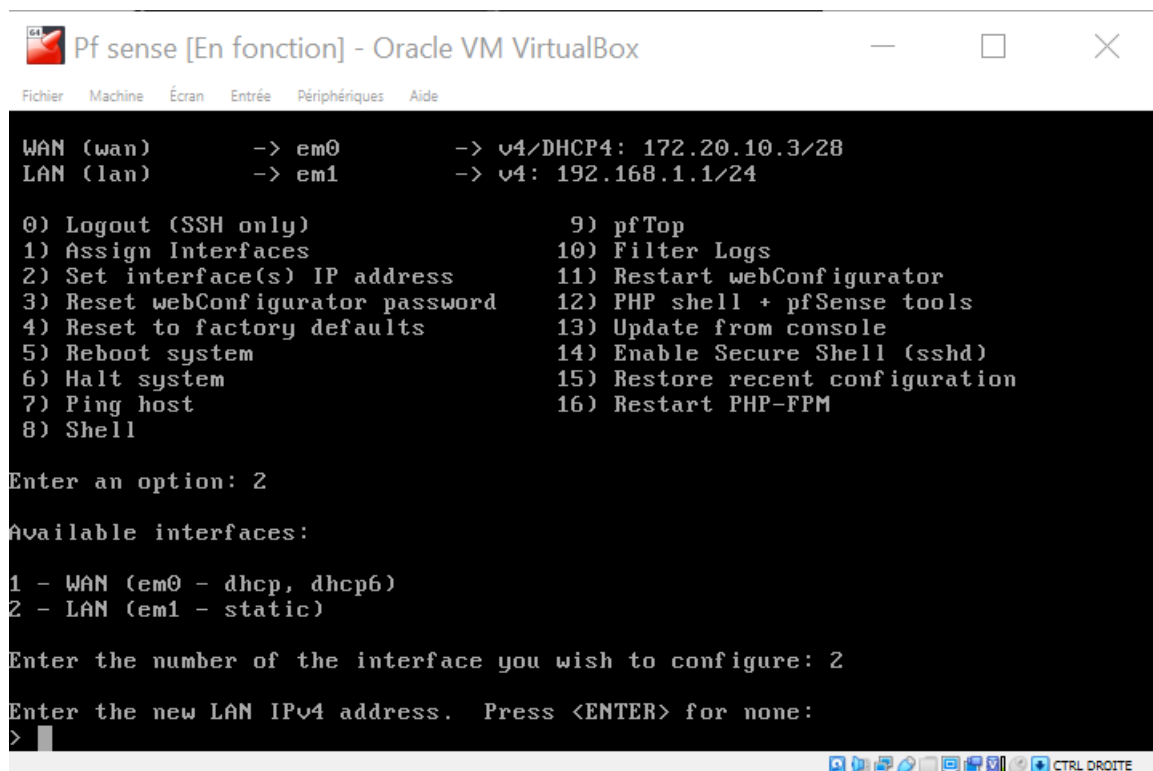
WAN (wan)      -> em0      -> v4/DHCP4: 172.20.10.3/28
LAN (lan)      -> em1      -> v4: 192.168.1.1/24

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:
Message from syslogd@pfSense at Jun 15 11:06:29 ...
php-fpm[3651]: /index.php: Successful login for user 'admin' from: 192.168.1.100
(Local Database)
```

Dans « Enter an option », il faut mettre un 2 pour selectionner cette option :

On prend la carte du réseau LAN donc on remet un 2 :



```
WAN (wan)      -> em0      -> v4/DHCP4: 172.20.10.3/28
LAN (lan)      -> em1      -> v4: 192.168.1.1/24

0) Logout (SSH only)          9) pfTop
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6) Halt system                15) Restore recent configuration
7) Ping host                  16) Restart PHP-FPM
8) Shell

Enter an option: 2

Available interfaces:

1 - WAN (em0 - dhcp, dhcp6)
2 - LAN (em1 - static)

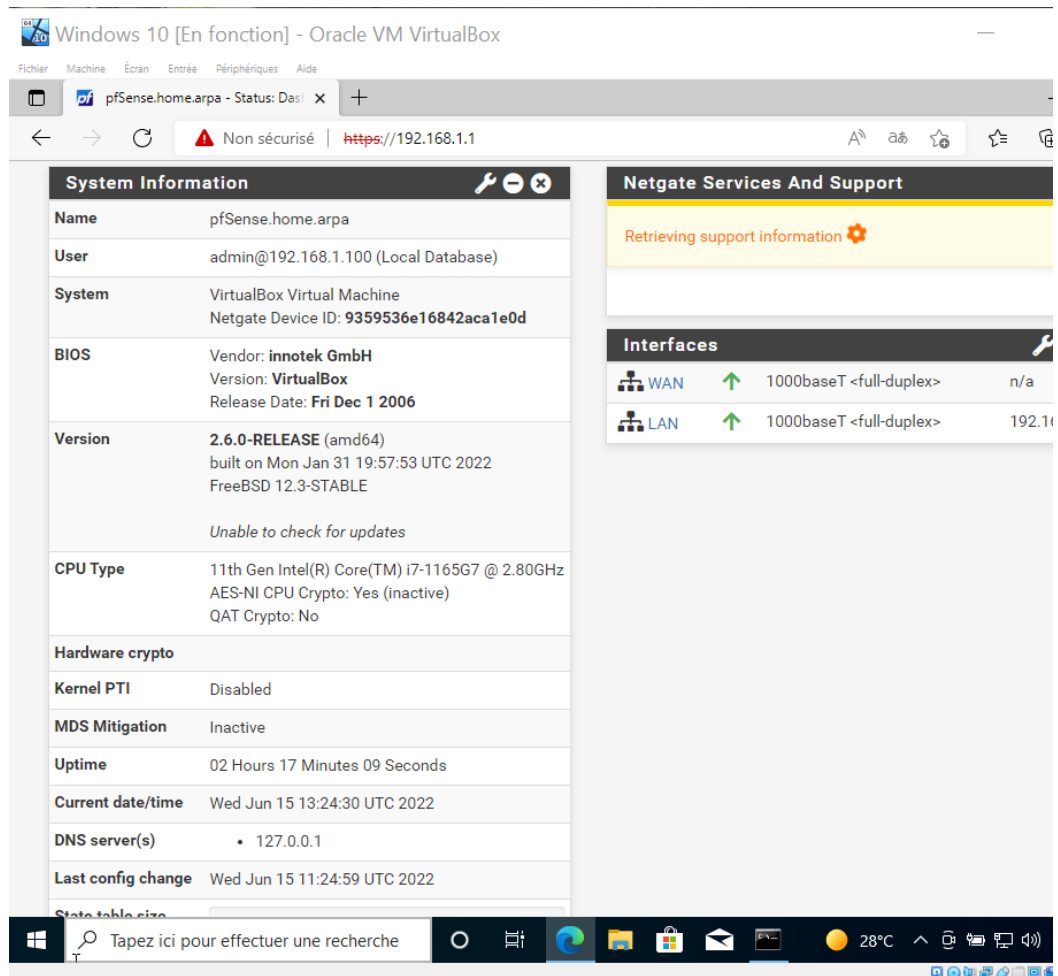
Enter the number of the interface you wish to configure: 2

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

J'ai déjà rentré l'IP et la passerelle au préalable.

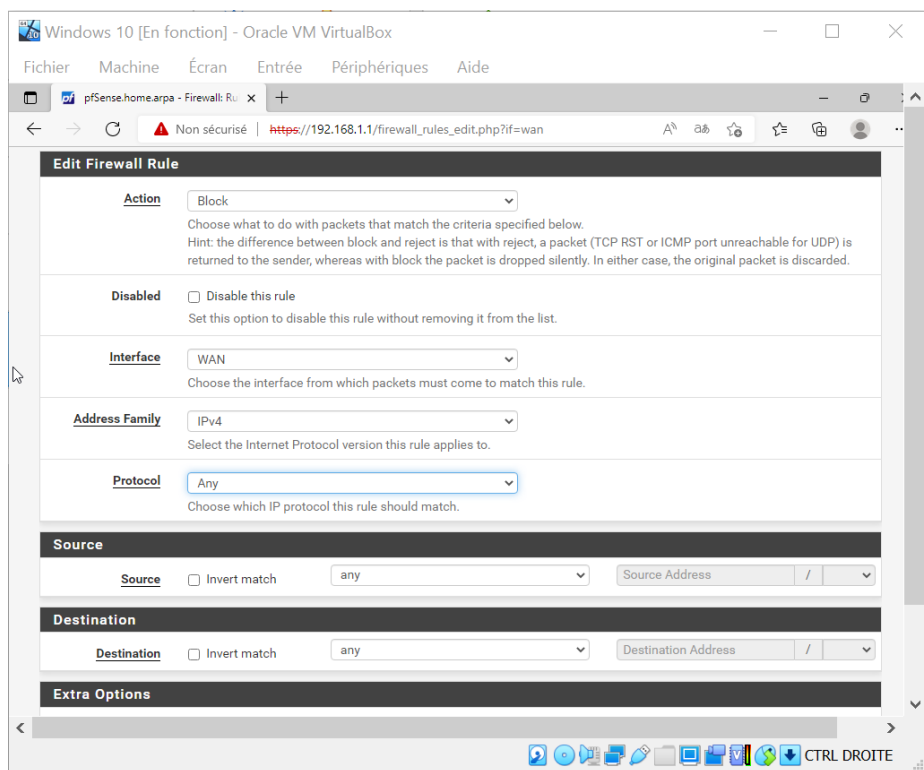
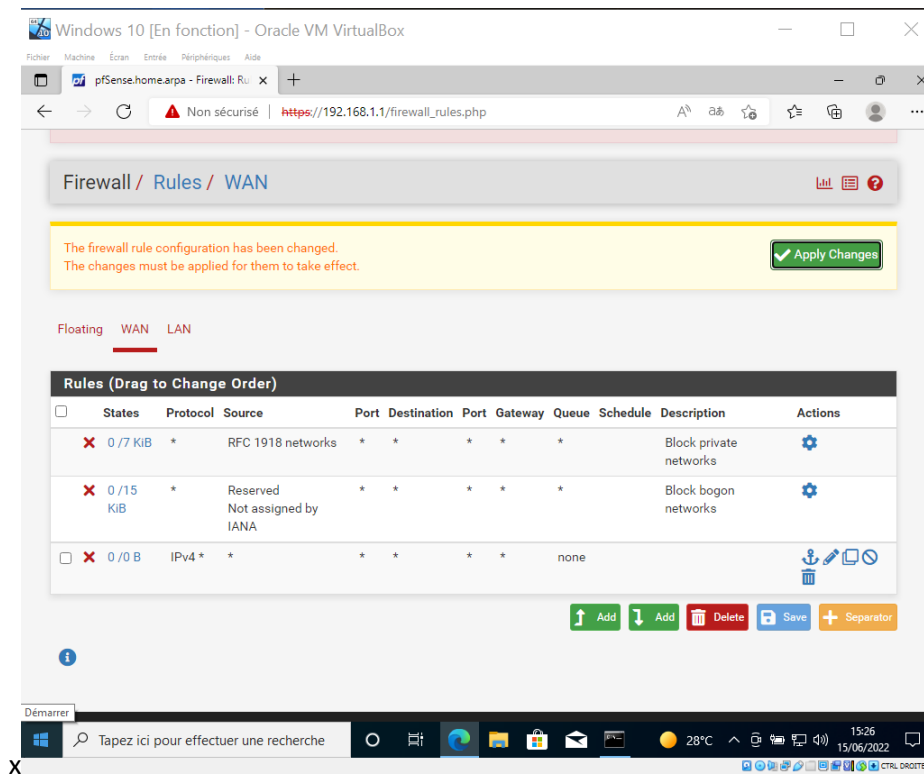
2- Connexion à Pf Sense

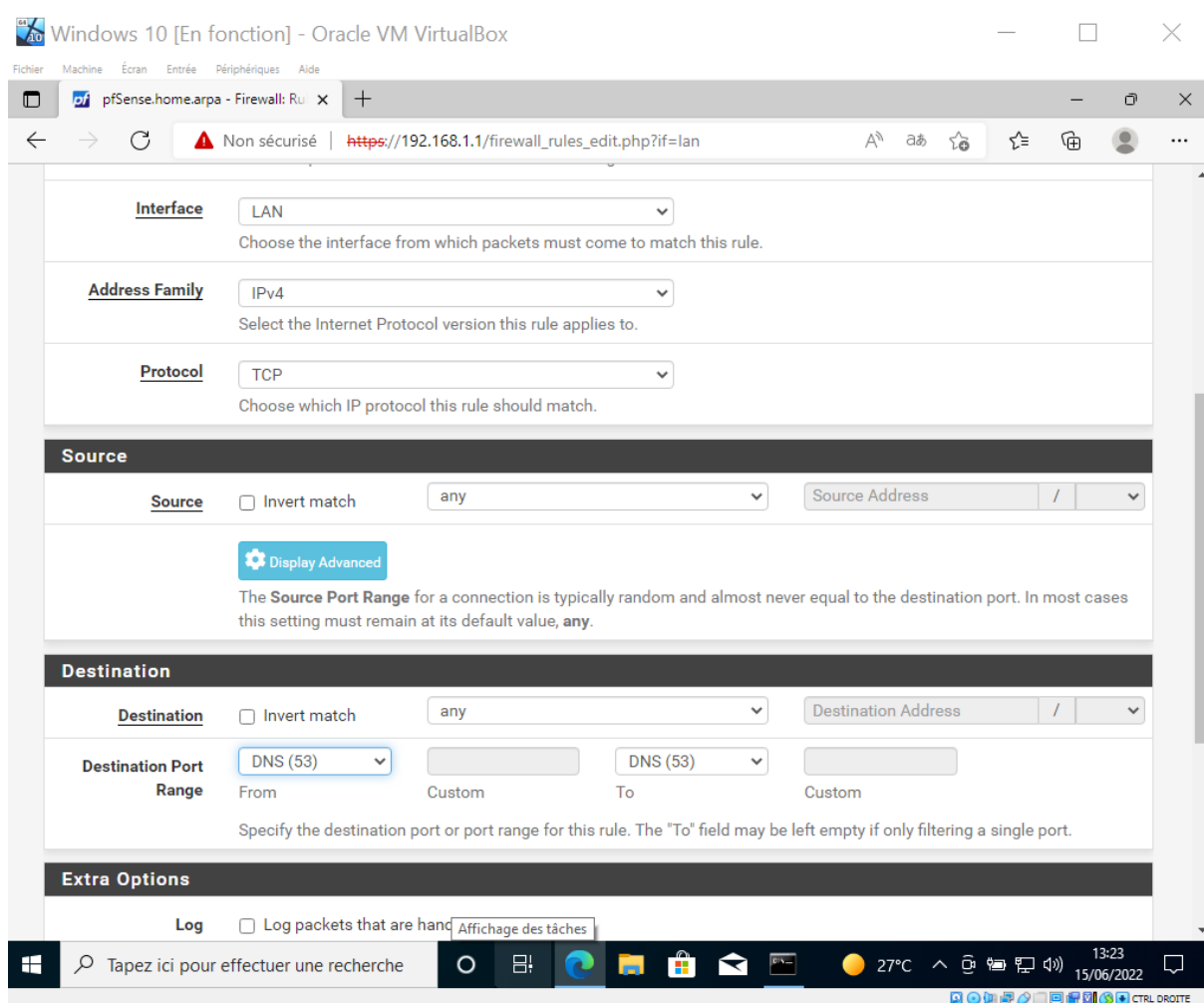
Sur notre navigateur qui se trouve dans notre VM client Windows 10, on va rentrer l'adresse IP LAN dans le server :



3- Deny all

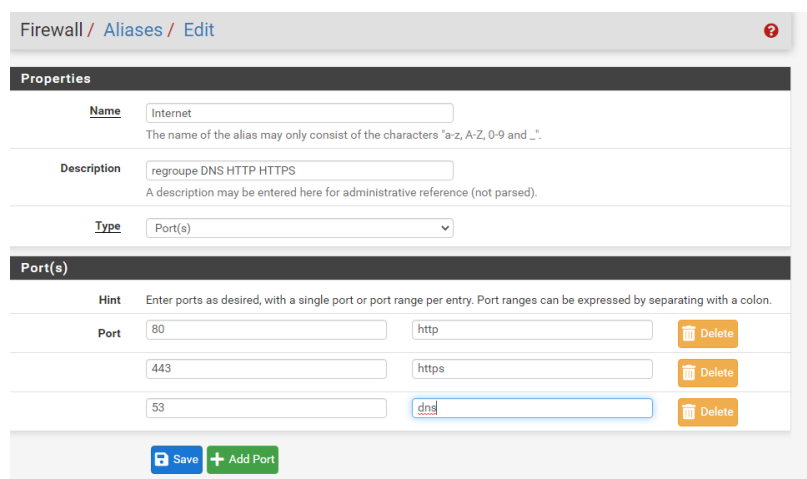
On va chercher à bloquer les accès sur les réseaux WAN et LAN. Nous allons donc nous rendre dans Firewall → Rules → WAN. Avant de quitter il faudra appuyer sur le bouton add pour sauvegarder .





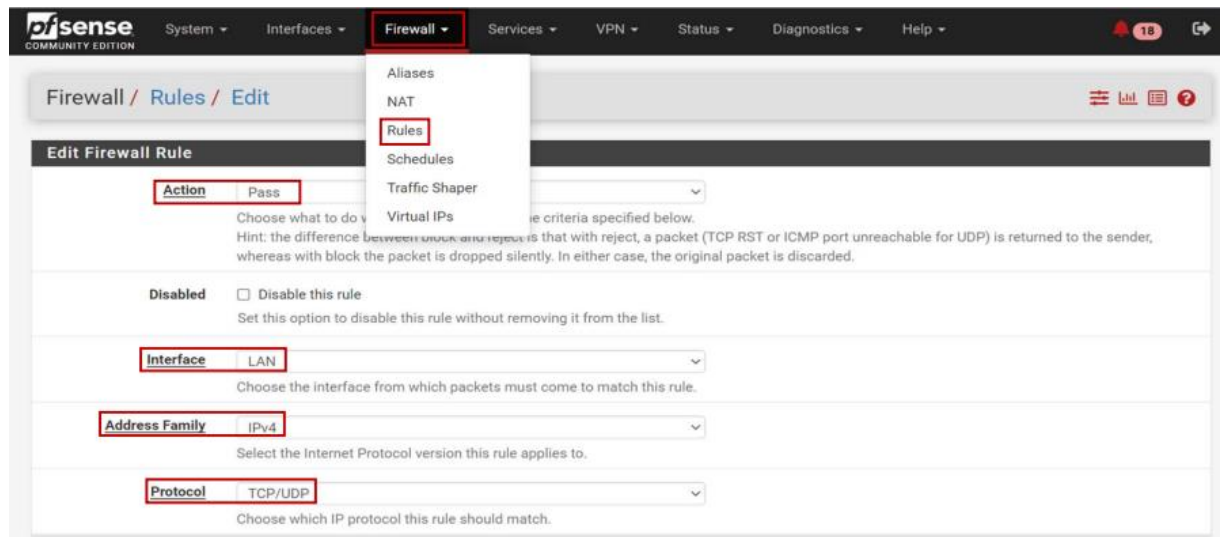
4- Ouverture des accès pour accéder à internet

On va encore faire un filtrage internet et pour cela il faudra qu'on aille dans Aliases qui se trouve dans l'onglet Firewall puis ajouter une règle pour Allow et indiquer les ports à ouvrir ainsi que leurs noms :

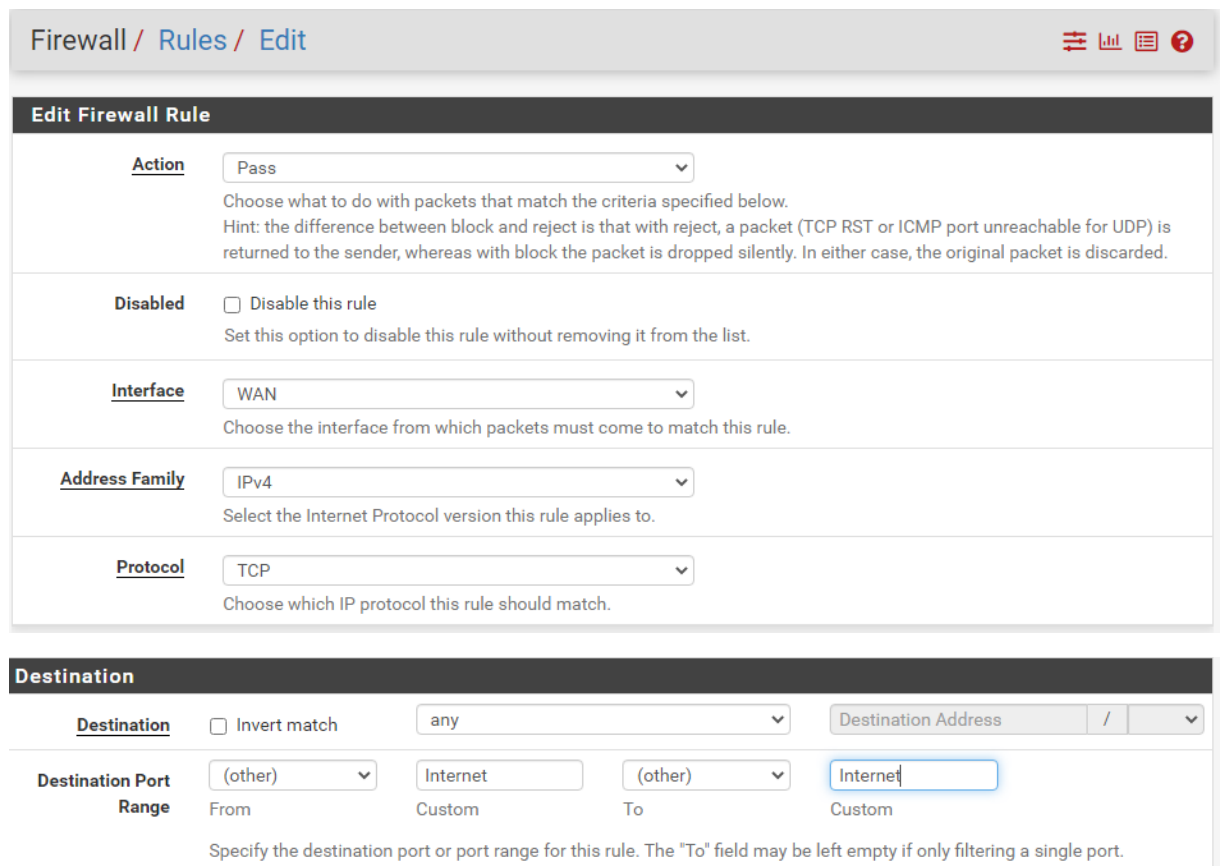


On va encore créer une règle dans le Firewall :

On va mettre « pass » comme action, « LAN » en interface, « IPV4 » en famille d'adresse et en protocole on va mettre TCP/UDP : (j'ai regroupé le tout en une photo)



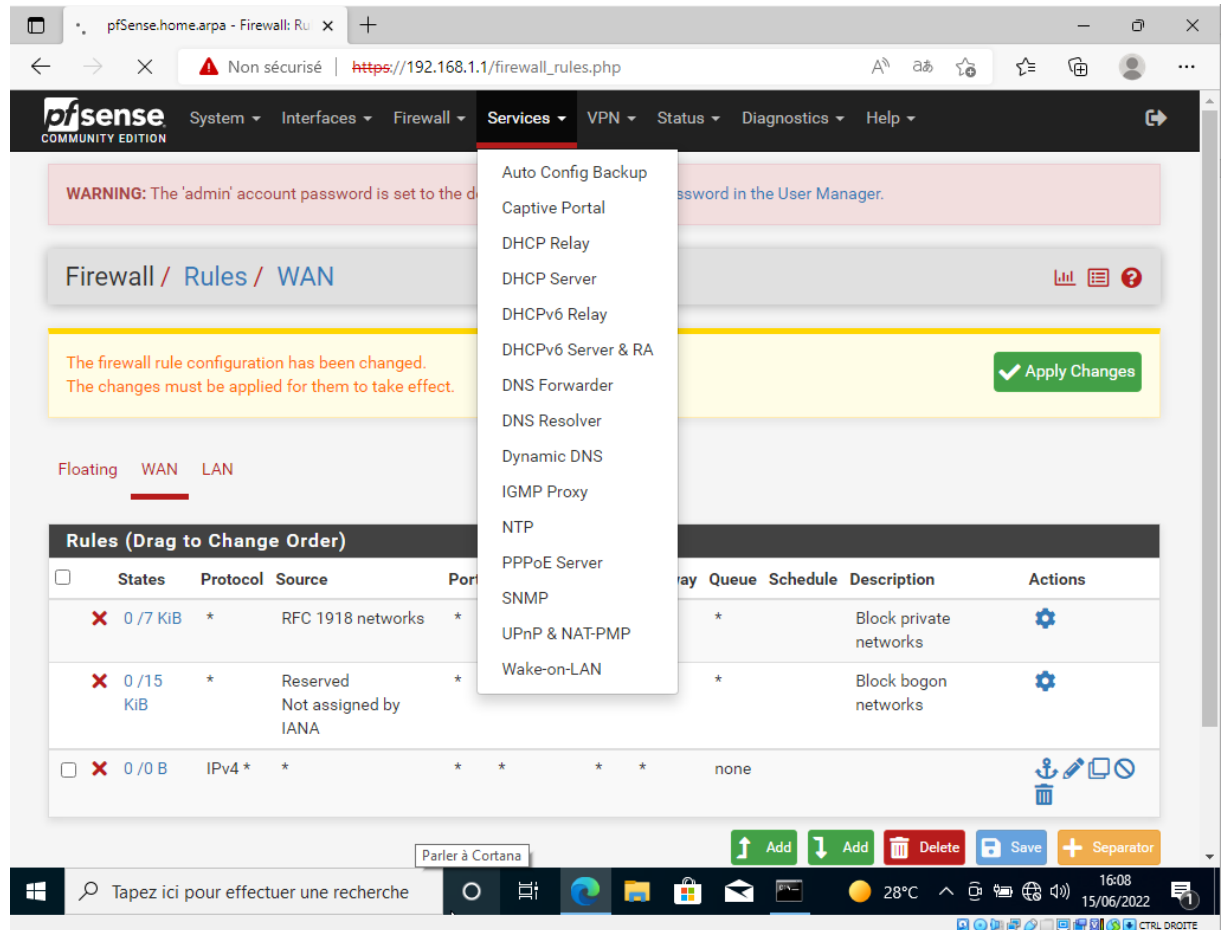
Et pour terminer, dans « destination » on va appliquer le « LAN » et mettre le chemin de l'alias. Après avoir configuré ça, dans l'onglet « RULES », on va créer une règle pour laisser passer nos ports :



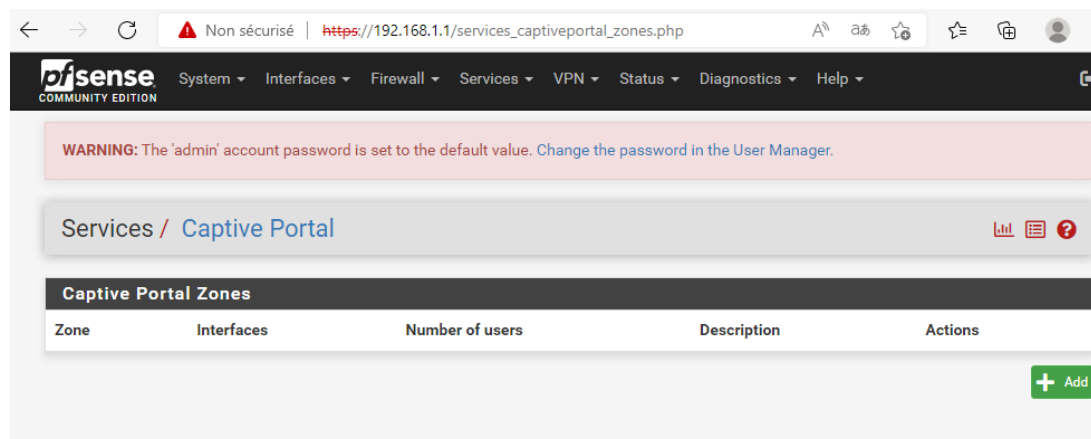
Une fois cette étape terminée, l'accès à internet est disponible.

5- Captive Portal

Il faut cliquer sur l'onglet « service » puis Captive Portal.



Pour ajouter un portail on va devoir cliquer sur « ADD » :



Mettre les différentes informations demandées :

The screenshot shows the 'Add Captive Portal Zone' form in the pfSense web interface. At the top, there is a warning message: 'WARNING: The 'admin' account password is set to the default value. Change the password in the User Manager.' The breadcrumb navigation is 'Services / Captive Portal / Add Zone'. The form has two main sections: 'Zone name' and 'Zone description'. The 'Zone name' field contains 'zone' and has a tooltip that says 'Zone name. Can only contain letters, digits, and underscores (_) and may not start with a digit.' The 'Zone description' field contains 'Zone_de_référence' and has a tooltip that says 'A description may be entered here for administrative reference (not parsed)'. At the bottom of the form is a blue button labeled 'Save & Continue'.

Non sécurisé | https://192.168.1.1/services_captiveportal_zones_edit.php

pfSense
COMMUNITY EDITION

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

WARNING: The 'admin' account password is set to the default value. Change the password in the User Manager.

Services / Captive Portal / Add Zone

Add Captive Portal Zone

Zone name
Zone name. Can only contain letters, digits, and underscores (_) and may not start with a digit.

Zone description
A description may be entered here for administrative reference (not parsed).

[Save & Continue](#)

Après la sauvegarde, il faut cocher la case « enable » et le LAN :

The screenshot shows the 'Captive Portal Configuration' page in the pfSense web interface. The breadcrumb navigation is 'Services / Captive Portal / zone / Configuration'. The page has several tabs: 'Configuration', 'MACs', 'Allowed IP Addresses', 'Allowed Hostnames', 'Vouchers', 'High Availability', and 'File Manager'. The 'Configuration' tab is selected. The 'Enable' section has a checkbox labeled 'Enable Captive Portal' which is checked. The 'Description' field contains 'Zone_de_référence'. The 'Interfaces' section has a dropdown menu with 'WAN' and 'LAN' options, and 'LAN' is selected. The 'Maximum concurrent connections' field is empty. The 'Idle timeout (Minutes)' field is empty. The 'Hard timeout (Minutes)' field is empty. At the bottom of the page, there is a Windows taskbar with various icons and the text 'CTRL OROITE'.

Non sécurisé | https://192.168.1.1/services_captiveportal.php?zone=zone

Services / Captive Portal / zone / Configuration

Configuration MACs Allowed IP Addresses Allowed Hostnames Vouchers High Availability File Manager

Captive Portal Configuration

Enable ☒ Enable Captive Portal

Description
A description may be entered here for administrative reference (not parsed).

Interfaces
Select the interface(s) to enable for captive portal.

Maximum concurrent connections
Limits the number of concurrent connections to the captive portal HTTP(S) server. This does not set how many users can be logged in to the captive portal, but rather how many connections a single IP can establish to the portal web server.

Idle timeout (Minutes)
Clients will be disconnected after this amount of inactivity. They may log in again immediately though. Leave this field blank for no idle timeout.

Hard timeout (Minutes)

Accédez aux paramètres pour activer Windows.

CTRL OROITE

Dans la partie « Authentication », sélectionner :

Authentication

Authentication Method Use an Authentication backend

Select an Authentication Method to use for this zone. One method must be selected.

- "Authentication backend" will force the login page to be displayed and will authenticate users.
- "None" method will force the login page to be displayed but will accept any valid user.
- "RADIUS MAC Authentication" method will try to authenticate devices automatically.

Authentication Server Local Database

You can add a remote authentication server in the [User Manager](#).

Vouchers could also be used, please go to the [Vouchers Page](#) to enable them.

Secondary authentication Server Local Database

On ajoutera pas plus de configuration dans cette partie donc une fois fait, on peut sauvegarder et passer à la suite.

Maintenant dans l'onglet « System » sélectionner « User Manager » :

Non sécurisé | https://192.168.1.1/system_usermanager.php

pfSense COMMUNITY EDITION

System / Interfaces / Firewall / Services / VPN / Status / Diagnostics / Help

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

System / Users

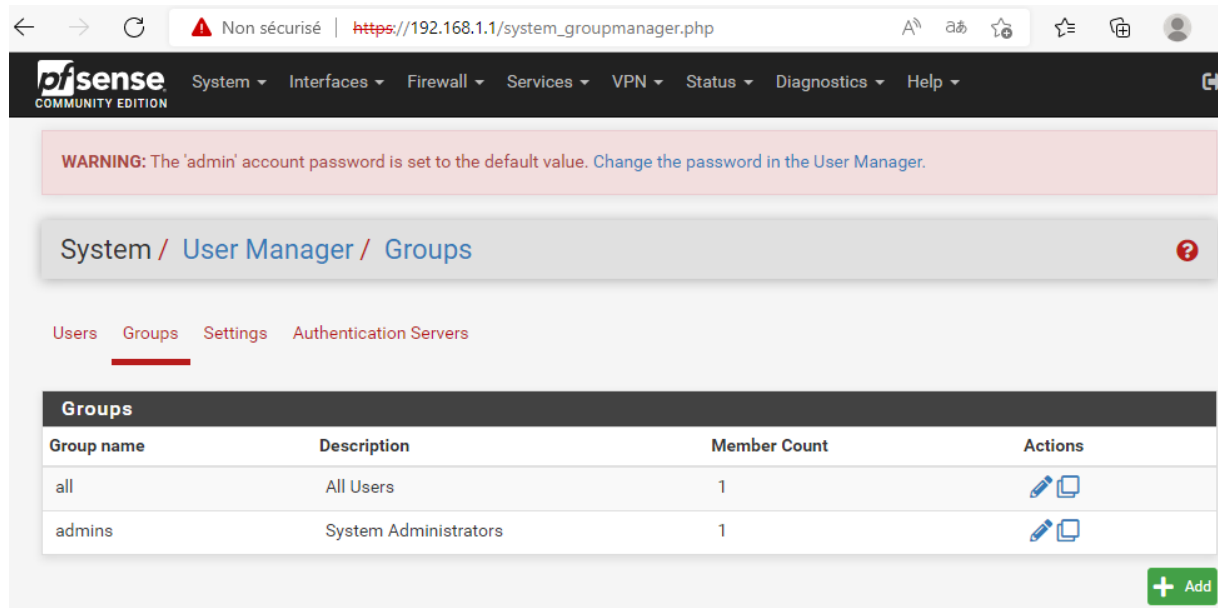
Users Groups

Users





name	Status	Groups	Actions
System Administrator	✓	admins	Edit

[+ Add](#) [Delete](#)

Ensuite « Groupe » :

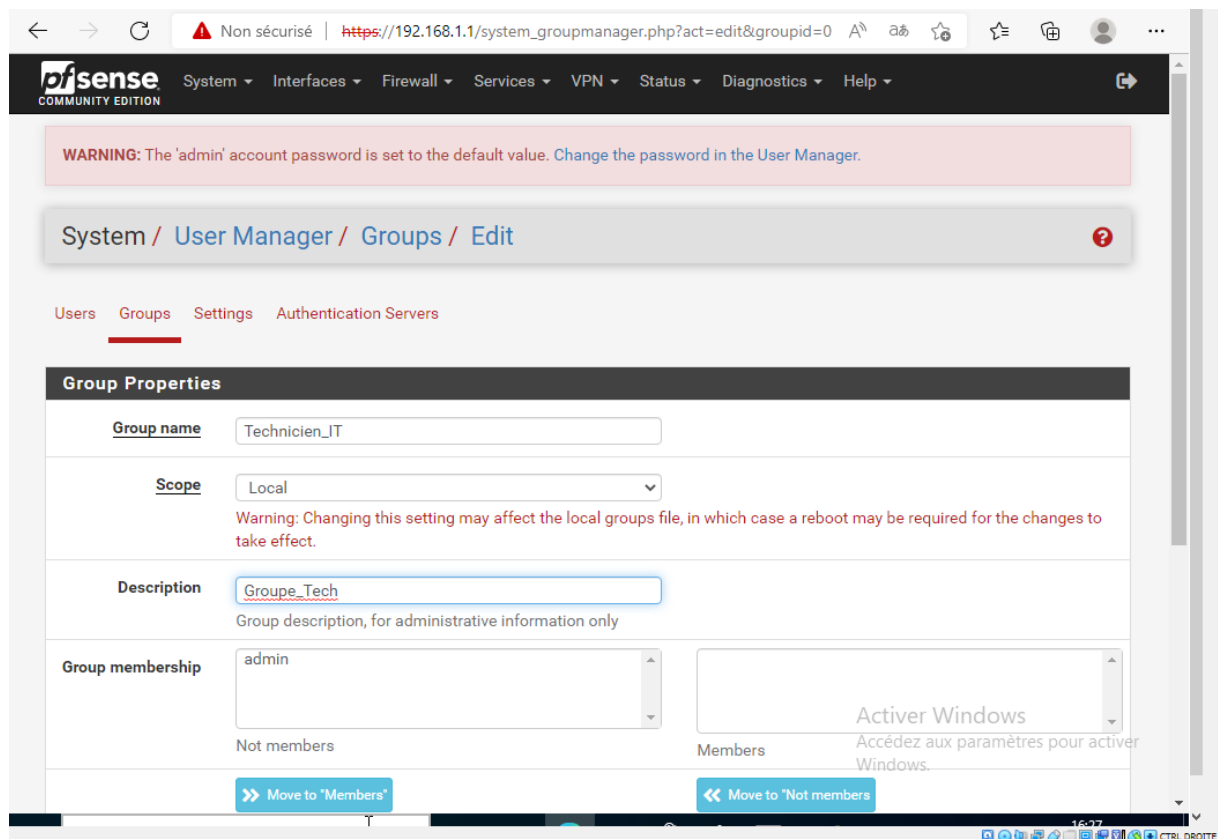


The screenshot shows the pfSense web interface at the URL https://192.168.1.1/system_groupmanager.php. A warning message at the top states: "WARNING: The 'admin' account password is set to the default value. Change the password in the User Manager." The breadcrumb trail is "System / User Manager / Groups". The "Groups" tab is selected in the navigation menu. Below the navigation menu, there is a table titled "Groups" with the following data:

Group name	Description	Member Count	Actions
all	All Users	1	 
admins	System Administrators	1	 

A green "+ Add" button is located at the bottom right of the table.

En cliquant sur « ADD » on va pouvoir ajouter les informations qu'on veut :



The screenshot shows the pfSense web interface at the URL https://192.168.1.1/system_groupmanager.php?act=edit&groupid=0. The breadcrumb trail is "System / User Manager / Groups / Edit". The "Groups" tab is selected in the navigation menu. Below the navigation menu, there is a form titled "Group Properties" with the following fields:

- Group name:**
- Scope:** (Warning: Changing this setting may affect the local groups file, in which case a reboot may be required for the changes to take effect.)
- Description:** (Group description, for administrative information only)
- Group membership:** (Not members)

At the bottom of the form, there are two buttons: "Move to 'Members'" and "Move to 'Not members'".

Et après on peut voir en faisant « save », que notre groupe est créé :

Non sécurisé | https://192.168.1.1/system_groupmanager.php








pfSense
COMMUNITY EDITION


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

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

System / **User Manager** / Groups ?

Users **Groups** Settings Authentication Servers

Groups			
Group name	Description	Member Count	Actions
Technicien_IT	Groupe_Tech	0	  
admins	System Administrators	1	 
all	All Users	1	 

 Add

Voilà à quoi ressemble le portail de connexion :

pfSense

First Authentication Method

User

Password

Second Authentication Method

User

Password

Login