

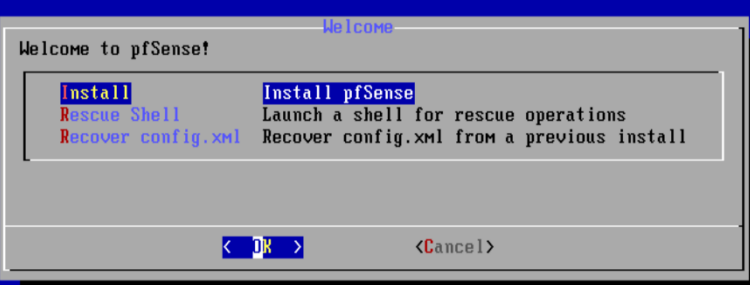
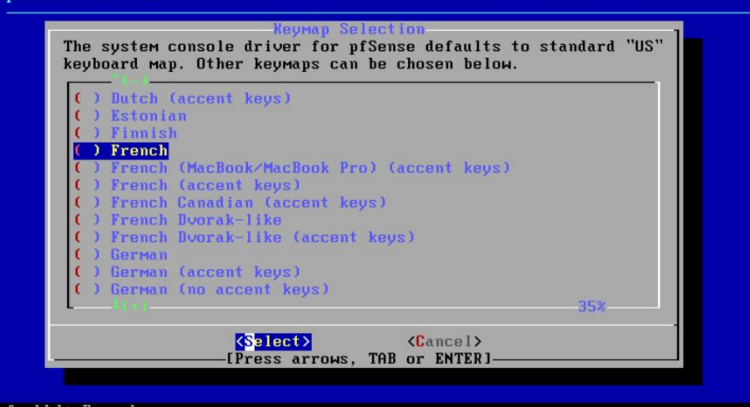
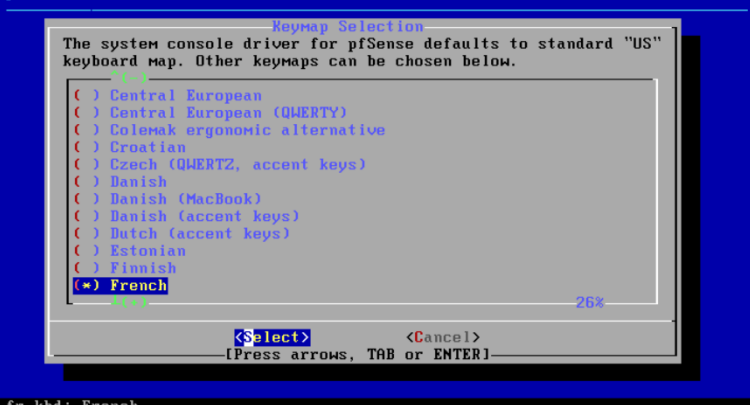
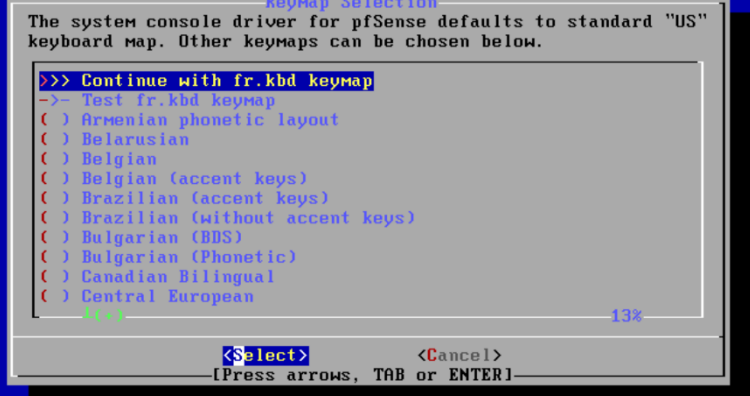
15 juin 2022 – SEYLLER William


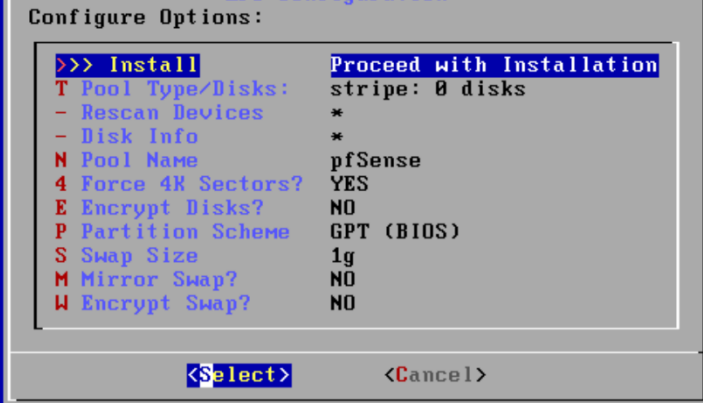
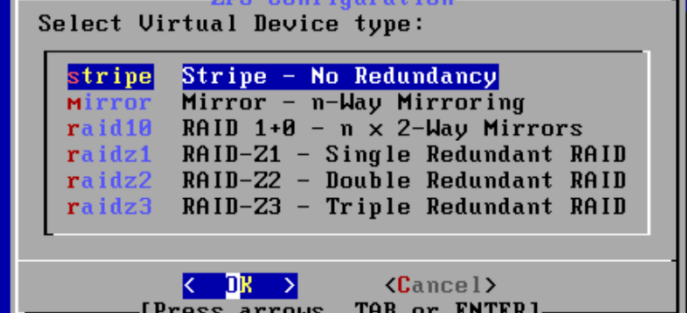
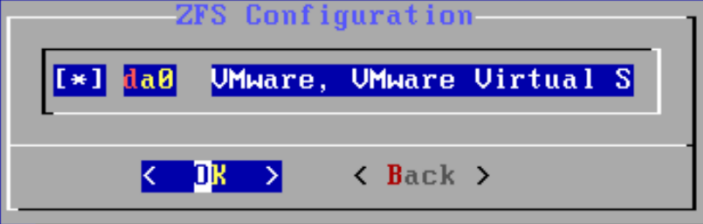
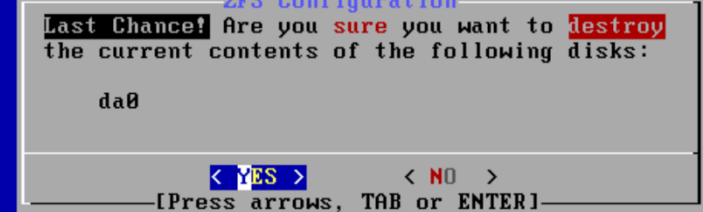
TP Pfsense

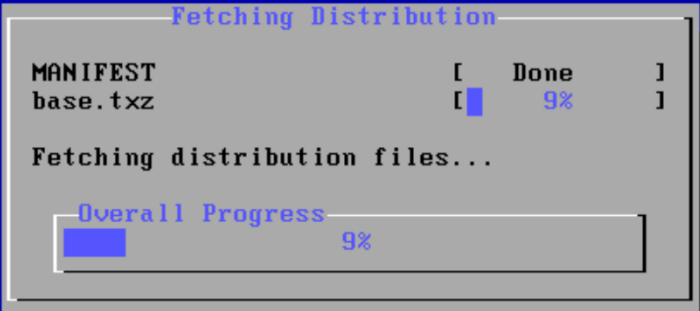
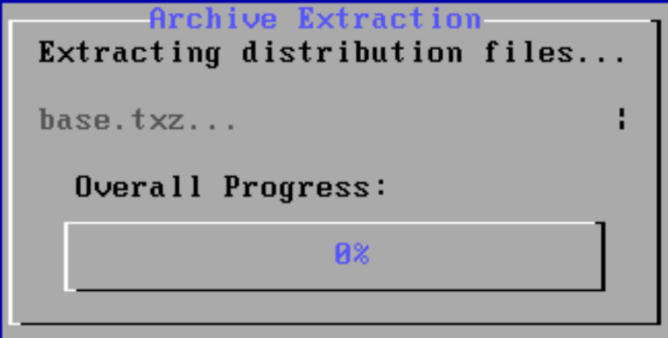
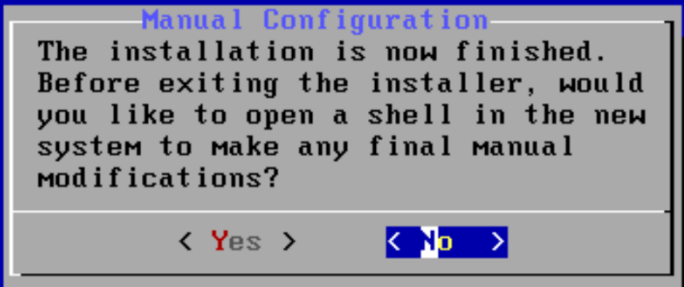
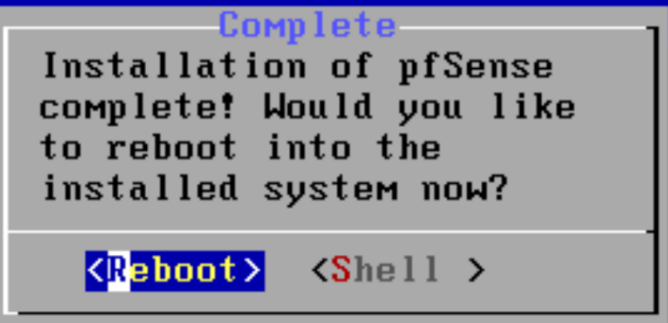
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Installation, configuration et paramétrage

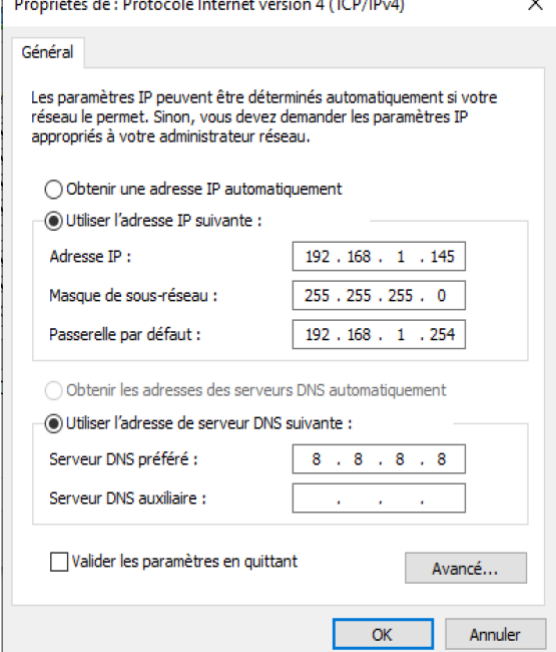
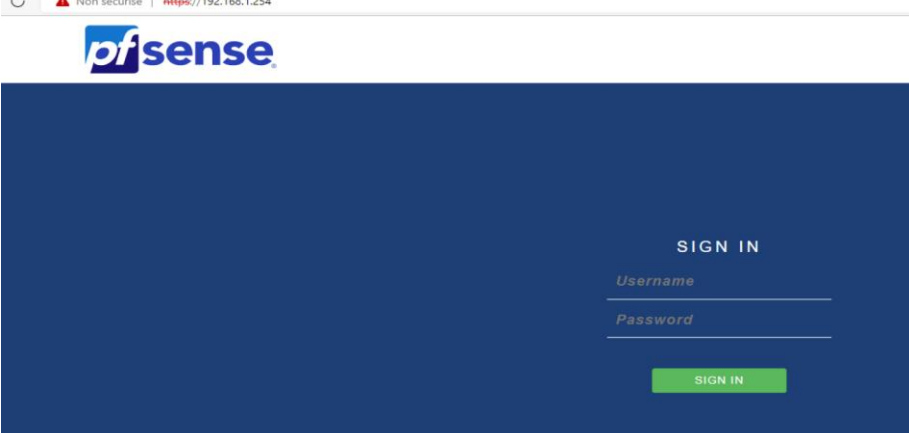
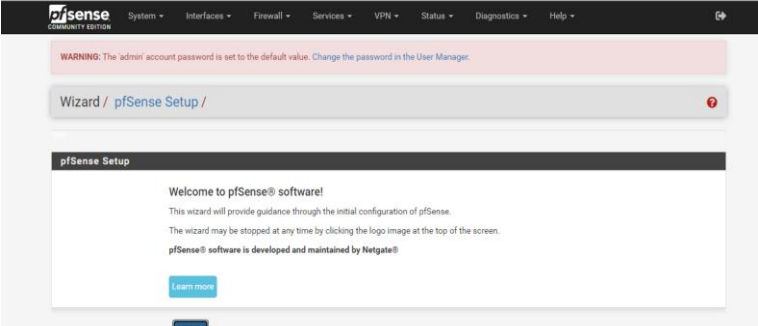
Cliquez sur « Install Install PfSense »	 <p>Welcome to pfSense!</p> <p>Install Install pfSense Rescue Shell Launch a shell for rescue operations Recover config.xml Recover config.xml from a previous install</p> <p>< OK > <Cancel></p>
Sélectionnez votre langage de clavier	 <p>pfSense Installer</p> <p>Keymap Selection</p> <p>The system console driver for pfSense defaults to standard "US" keyboard map. Other keymaps can be chosen below.</p> <p>() Dutch (accent keys) () Estonian () Finnish (*) French () French (MacBook/MacBook Pro) (accent keys) () French (accent keys) () French Canadian (accent keys) () French Dvorak-like () French Dvorak-like (accent keys) () German () German (accent keys) () German (no accent keys)</p> <p>35%</p> <p><Select> <Cancel> [Press arrows, TAB or ENTER]</p>
Validez	 <p>fr.kbd: French pfSense Installer</p> <p>Keymap Selection</p> <p>The system console driver for pfSense defaults to standard "US" keyboard map. Other keymaps can be chosen below.</p> <p>() Central European () Central European (QWERTY) () Colemak ergonomic alternative () Croatian () Czech (QWERTZ, accent keys) () Danish () Danish (MacBook) () Danish (accent keys) () Dutch (accent keys) () Estonian () Finnish (*) French</p> <p>26%</p> <p><Select> <Cancel> [Press arrows, TAB or ENTER]</p>
Validez	 <p>fr.kbd: French</p> <p>Keymap Selection</p> <p>The system console driver for pfSense defaults to standard "US" keyboard map. Other keymaps can be chosen below.</p> <p>>>> Continue with fr.kbd keymap ->- test fr.kbd keymap () Armenian phonetic layout () Belarusian () Belgian () Belgian (accent keys) () Brazilian (accent keys) () Brazilian (without accent keys) () Bulgarian (BDS) () Bulgarian (Phonetic) () Canadian Bilingual () Central European</p> <p>13%</p> <p><Select> <Cancel> [Press arrows, TAB or ENTER]</p>

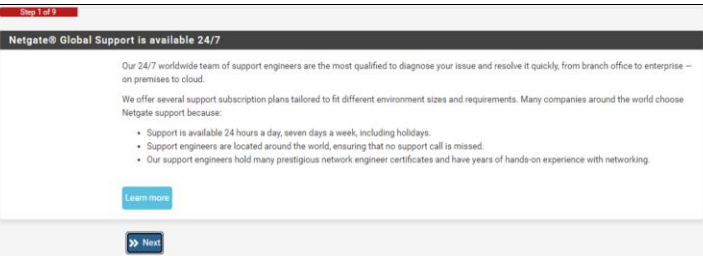
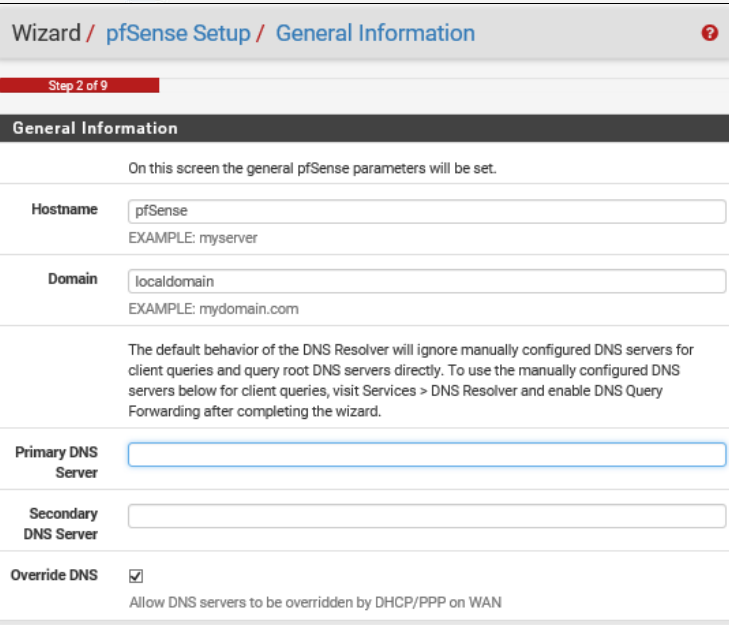
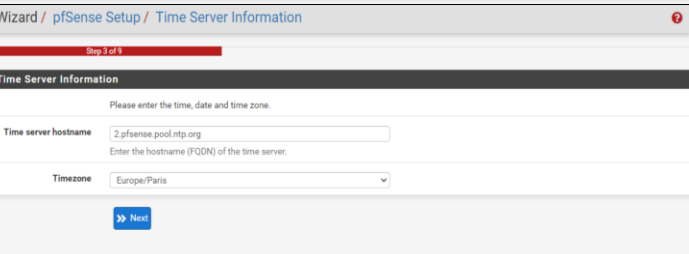
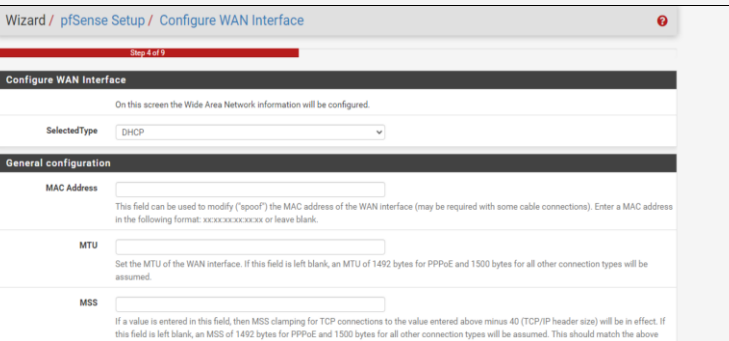
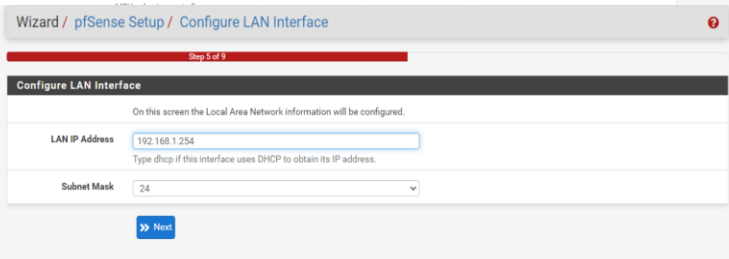
<p>Choisissez votre partition et cliquez sur « OK », restez sur « Auto (UFS) » si vous n'avez pas besoin d'une configuration spécifique.</p>	
<p>Continuez</p>	
<p>Sans redondance dans notre cas</p>	
<p>Sélectionnez da0 avec espace et cliquez sur OK</p>	
<p>Cliquez sur « YES »</p>	

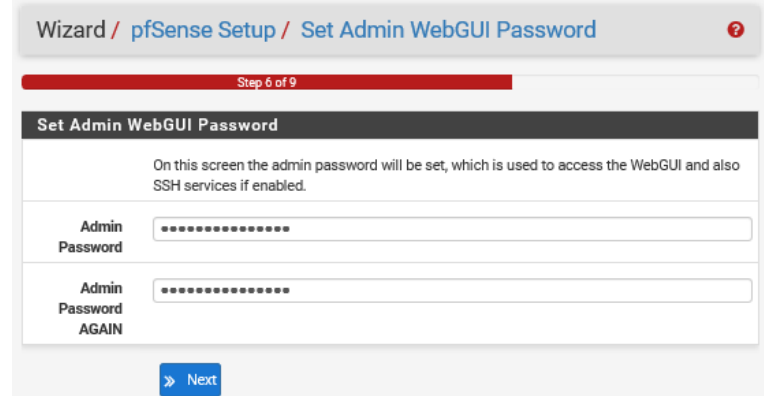
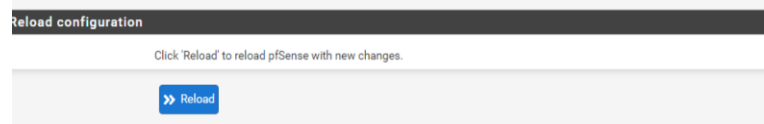
Patientez	 <p>Fetching Distribution</p> <p>MANIFEST [Done] base.txz [9%]</p> <p>Fetching distribution files...</p> <p>Overall Progress 9%</p>
Patientez	 <p>Archive Extraction</p> <p>Extracting distribution files...</p> <p>base.txz... :</p> <p>Overall Progress:</p> <p>8%</p>
Sélectionnez « No » et appuyez sur Entrée	 <p>Manual Configuration</p> <p>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?</p> <p>< Yes > < No ></p>
Redémarrez le système	 <p>Complete</p> <p>Installation of pfSense complete! Would you like to reboot into the installed system now?</p> <p>< Reboot > < Shell ></p>

<p>Configurez l'adresse souhaitée IP souhaite (IP, masque, ...)</p>	<pre> 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 32): > 24 For a WAN, enter the new LAN IPv4 upstream gateway address. For a LAN, press <ENTER> for none: > 16 not an IPv4 IP address! For a WAN, enter the new LAN IPv4 upstream gateway address. For a LAN, press <ENTER> for none: > 8 not an IPv4 IP address! For a WAN, enter the new LAN IPv4 upstream gateway address. For a LAN, press <ENTER> for none: > Enter the new LAN IPv6 address. Press <ENTER> for none: > █ </pre>
<p>L'installation est terminée sur pfsense</p>	<pre> The IPv4 LAN address has been set to 192.168.1.254/24 You can now access the webConfigurator by opening the following URL in your web browser: https://192.168.1.254/ Press <ENTER> to continue. VMware Virtual Machine - Netgate Device ID: f2220d6bc70afe608775 *** Welcome to pfSense 2.6.0-RELEASE (amd64) on pfSense *** WAN (wan) -> em0 -> LAN (lan) -> em1 -> v4: 192.168.1.254/24 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: █ </pre>

Configuration sur le client Windows 10

	<p>Attachez une adresse IP sur le client windows 10 dans le même sous réseau que Pfsense et mettez l'ip de Pfsense en passerelle par défaut, insérez le serveur DNS de Google (8.8.8.8)</p> <p>IP de Pfsense dans notre cas : 192.168.1.254</p>
	<p>Connectez vous à PFsense à l'aide d'un navigateur internet en tapant son IP et connectez vous</p> <p>Login de base : admin</p> <p>Mot de passe : pfsense</p>
	<p>Cliquez sur Next</p>

		Cliquez sur Next
		Mettez le DNS et cliquez sur Next
		Mettez Europe/Paris en horaire et cliquez sur Next
		Cliquez sur Next, Décochez les deux dernières cases si vous travaillez avec des réseaux privés
		Laissez L'IP de base car c'est celle déjà configuré en amont et cliquez sur Next

		Sélectionnez votre mot de passe puis continuez
		Rechargez la configuration pour appliquer les modifications

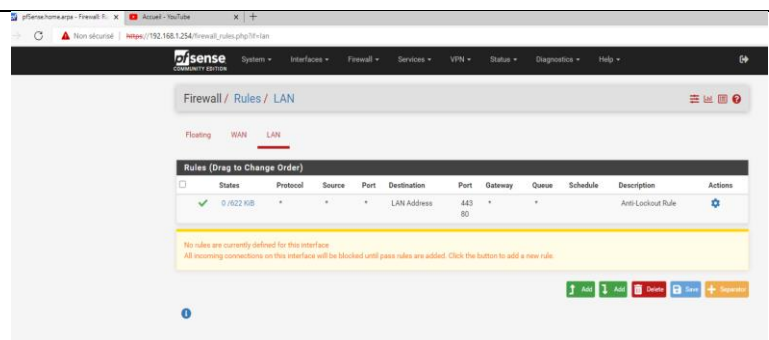
PfSense est configuré sur Windows.

```
Message from syslogd@pfSense at Jun 15 07:24:51 ...
php-fpm[368]: /index.php: Successful login for user 'admin' from: 192.168.1.145
(Local Database)
```

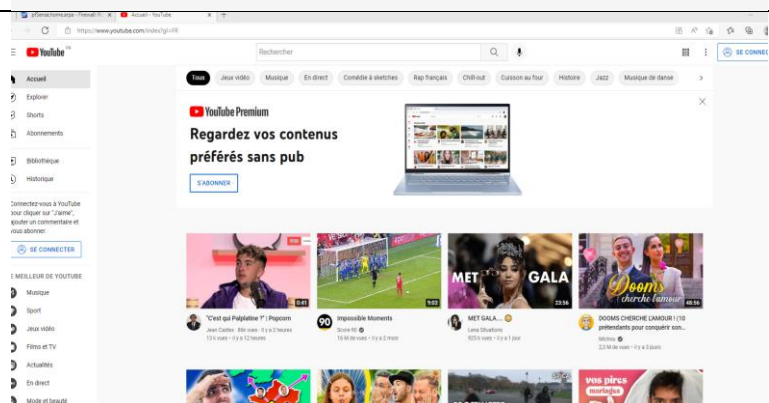
La connexion au firewall a bien été réussie

Règle : filtrage « deny all »

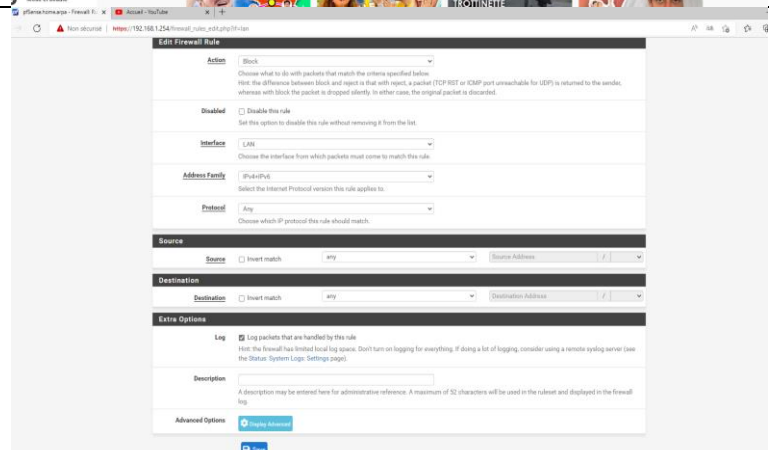
Pour l'instant aucune règle n'est appliquée



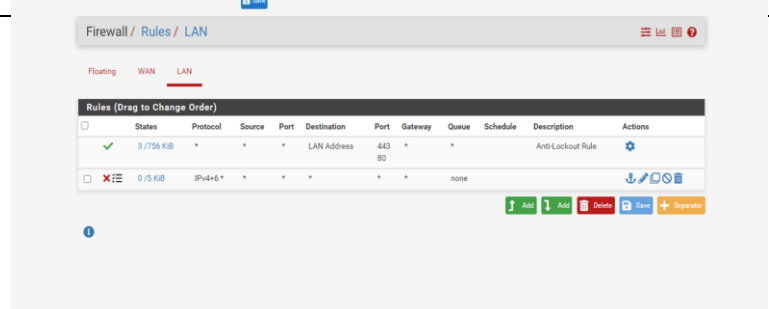
Aucune règle n'est appliquée donc tout est ouvert



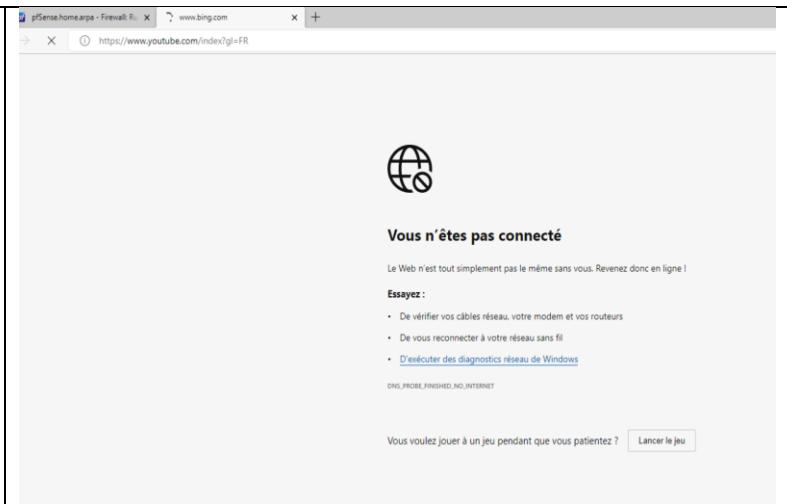
Ajout de la règle « deny all »,
Action : Block sur l'interface LAN
et tous les sources entrantes et sortantes



La règle est appliquée



Suite à l'application de la règle
« deny all » tout est bloqué, ce
qui était attendu



Règle : filtrage internet

Seule la règle « deny all » est appliquée

Firewall / Rules / LAN

Floating

WAN

LAN

Rules (Drag to Change Order)

	States	Protocol	Source	Port	Destination	Port	Gateway	Queue	Schedule	Description	Actions
<input checked="" type="checkbox"/>	✓	3 /756 KiB	*	*	LAN Address	443 80	*	*		Anti-Lockout Rule	
<input type="checkbox"/>	✗	0 /5 KiB	IPv4+6 *	*	*	*	*	none			

Add

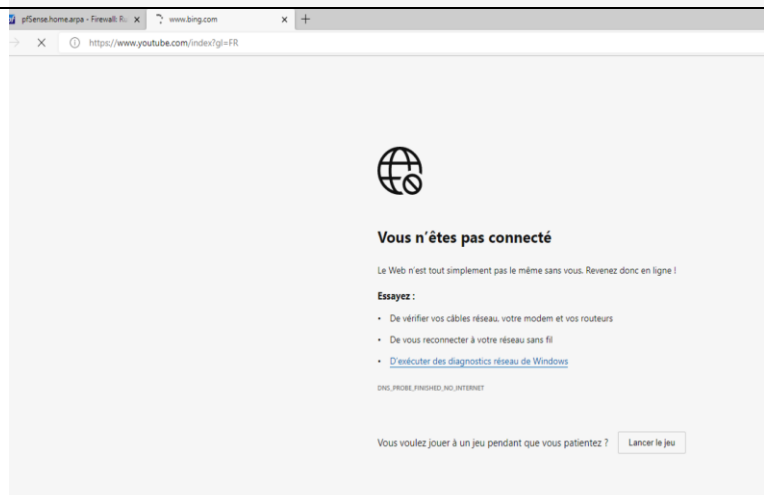
Add

Delete

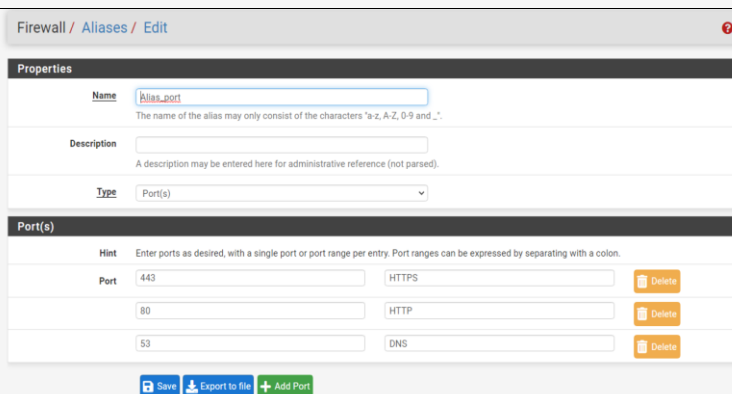
Save

Export

Tout est bloqué suite à l'application de cette règle



Création d'un alias de port pour regrouper les ports 443, 80 et 53



Firewall / Aliases / Edit

Properties

Name:
The name of the alias may only consist of the characters "a-z, A-Z, 0-9 and _".

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

Type:

Port(s)

Hint: Enter ports as desired, with a single port or port range per entry. Port ranges can be expressed by separating with a colon.

Port	Protocol	Action
443	HTTPS	
80	HTTP	
53	DNS	

Save Export to file Add Port

Création de la règle d'ouverture
ICMP de tous les ports
Action : Pass
Interface : LAN
Protocol : ICMP
Source et Destination en any

The screenshot shows the configuration of a Firewall Rule in Mikrotik WinBox. The rule is named "Pass" and is set to "Pass" action. The "Disabled" checkbox is unchecked. The "Interface" is set to "LAN". The "Address Family" is set to "IPv4". The "Protocol" is set to "ICMP". The "ICMP Subtypes" list includes "any", "Alternate Host", "Datagram conversion error", and "Echo reply". The "Source" and "Destination" fields are both set to "any". The "Log" checkbox is checked, and the "Log" field is set to "Log packets that are handled by this rule".

Création de la règle d'ouverture
TCP/UDP pour les ports 443, 80
et 53
Action : Pass
Interface : LAN
Protocol : TCP/UDP
Source : LAN net
Destination : 443, 80 et 53 (alias)

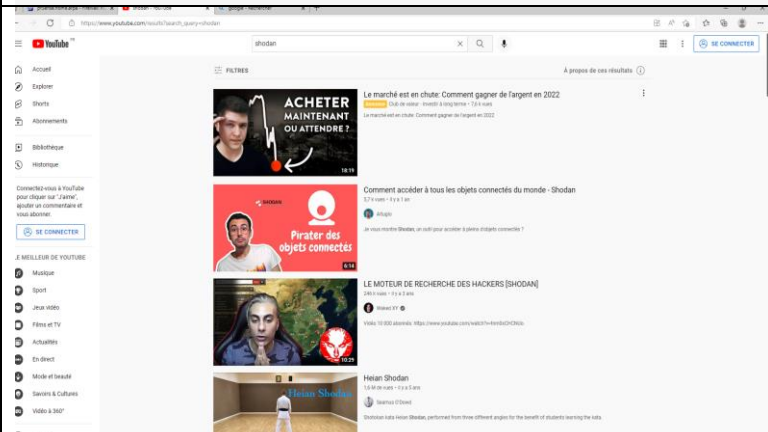
The screenshot shows the configuration of a Firewall Rule in Mikrotik WinBox. The rule is named "Pass" and is set to "Pass" action. The "Disabled" checkbox is unchecked. The "Interface" is set to "LAN". The "Address Family" is set to "IPv4". The "Protocol" is set to "TCP/UDP". The "Source" field is set to "LAN net". The "Destination" field is set to "any". The "Destination Port Range" is set to "From" and "To" fields, with "From" set to "443, 80, 53" and "To" set to "443, 80, 53". The "Log" checkbox is checked, and the "Log" field is set to "Log packets that are handled by this rule".

Application de ces règles

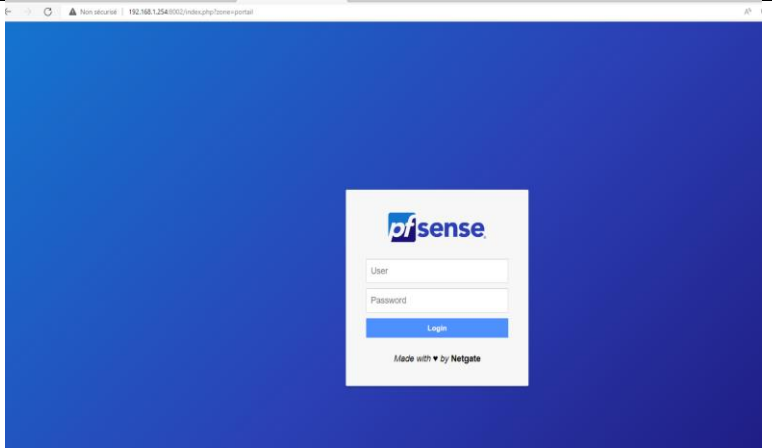

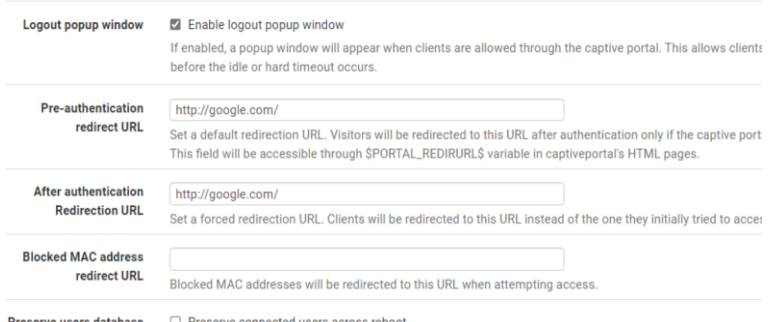
The screenshot shows the "Firewall / Rules / LAN" page in Mikrotik WinBox. The "Rules (Drag to Change Order)" table is displayed, showing the rules created for ICMP and TCP/UDP.

Rules (Drag to Change Order)	States	Protocol	Source	Port	Destination	Port	Gateway	Queue	Schedule	Description	Actions
✓ 4 / 935 KIB	*	*	*	LAN Address	443 80	*	*	*	*	Anti-Lockout Rule	⚙️
✓ 0 / 0 B	*	IPv4 ICMP	*	*	*	*	*	*	none		⬇️ ⬆️ ⬇️ ⬆️ ⬇️ ⬆️
✓ 20 / 1.56 MB	*	IPv4 TCP/UDP	LAN net	*	*	Alias_port	*	*	none		⬇️ ⬆️ ⬇️ ⬆️ ⬇️ ⬆️
✗ 0 / 48 KIB	*	IPv4 *	LAN net	*	*	*	*	*	none		⬇️ ⬆️ ⬇️ ⬆️ ⬇️ ⬆️

Suite à l'application de ces
règles, l'accès aux pages web est
fonctionnel



Portail Captif

<p>Portail de connexion du portail captif</p>	
<p>Le portail a été configuré, essayons de se connecter avec un compte enregistré, (compte : test)</p>	
<p>Après la connexion au portail il nous redirige vers la page google.com</p>	

La redirection se fait
correctement, le portail captif
est bien fonctionnel

