

PROXYLAB

Environnement : PfSense

Matériel : Serveur DELL

Installation

A l'aide d'une clé USB bootable.



Configuration des interfaces LAN et WAN

```
pfSense - Netgate Device ID: 42b03a0fd100427f8f55
*** Welcome to pfSense 2.4.4-RELEASE-p3 (amd64) on ProxyLab ***

WAN (wan)      -> bge0      -> v4: 10.101.0.2/30
LAN (lan)      -> re0       -> v4: 172.31.0.2/30

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) Disable Secure Shell (sshd)
6) Halt system                 15) Restore recent configuration
7) Ping host                   16) Restart PHP-FPM
8) Shell

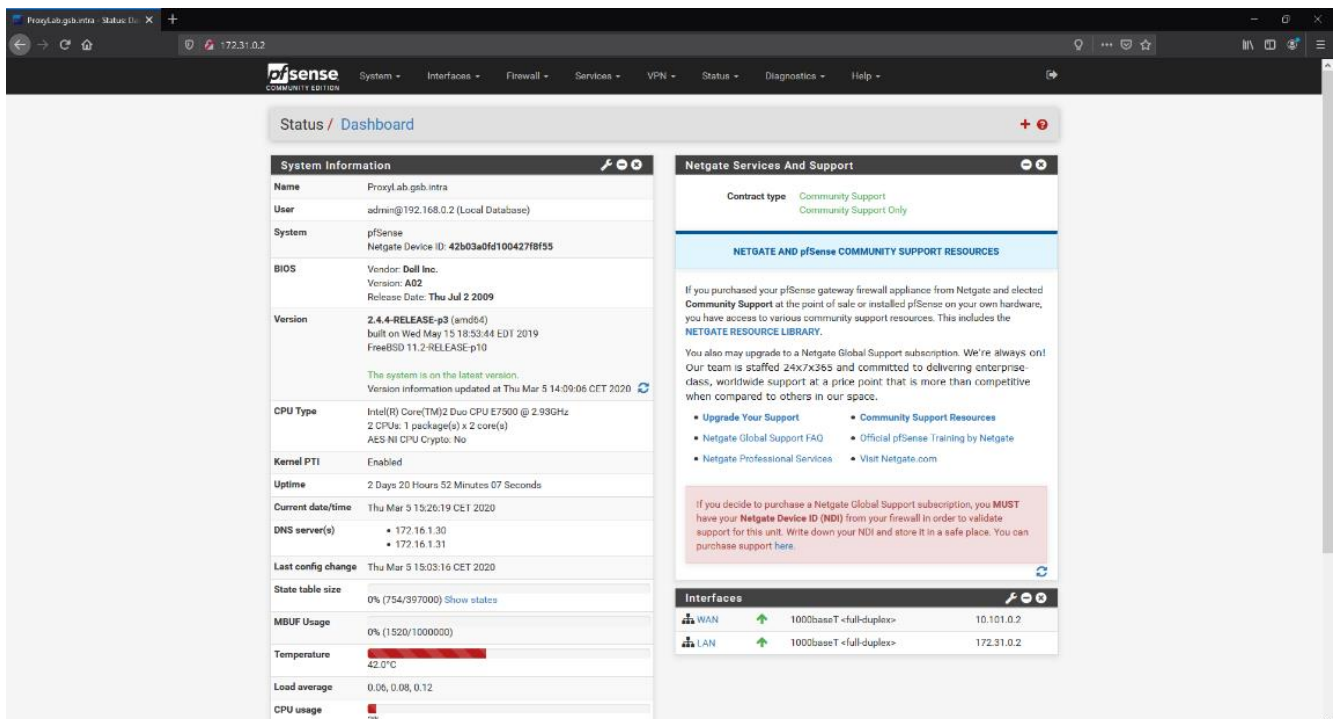
Enter an option: █
```

Configuration initiale

L'interface web de configuration est disponible à l'adresse IP LAN du routeur.



Page d'accueil de PfSense



Configuration de la passerelle par défaut et ajout de la seconde passerelle à destination du switch de niveau 3 et création des routes nécessaire pour les différents réseaux.

System / Routing / Gateways

Gateways Static Routes Gateway Groups

Gateways

Name	Default	Interface	Gateway	Monitor IP	Description	Actions
<input checked="" type="checkbox"/> GW_WAN (default)	Default (IPv4)	WAN	10.101.0.1		Interface wan Gateway	
<input checked="" type="checkbox"/> gw172_31_0_1		LAN	172.31.0.1			

Save Add

Default gateway

Default gateway IPv4: GW_WAN
Select the gateway or gatewaygroup to use as the default gateway.

Default gateway IPv6: None
Select the gateway or gatewaygroup to use as the default gateway.

Save

System / Routing / Static Routes

Gateways Static Routes Gateway Groups

Static Routes

Network	Gateway	Interface	Description	Actions
<input checked="" type="checkbox"/> 192.168.0.0/16	gw172_31_0_1 - 172.31.0.1	LAN		
<input checked="" type="checkbox"/> 172.16.1.0/24	gw172_31_0_1 - 172.31.0.1	LAN		

Add

Activation du NAT sortant.

Firewall / NAT / Outbound

Port Forward 1:1 Outbound NPT

Outbound NAT Mode

Mode: Automatic outbound NAT rule generation. (IPsec passthrough included) Hybrid Outbound NAT rule generation. (Automatic Outbound NAT + rules below) Manual Outbound NAT rule generation. (AON - Advanced Outbound NAT) Disable Outbound NAT rule generation. (No Outbound NAT rules)

Save

Mappings

Interface	Source	Source Port	Destination	Destination Port	NAT Address	NAT Port	Static Port	Description	Actions

Automatic Rules:

Interface	Source	Source Port	Destination	Destination Port	NAT Address	NAT Port	Static Port	Description
<input checked="" type="checkbox"/> WAN	127.0.0.0/8 -1/128 172.31.0.0/30	192.168.0.0/16	172.16.1.0/24	*	*	500	WAN address	Auto created rule for ISAKMP
<input checked="" type="checkbox"/> WAN	127.0.0.0/8 -1/128 172.31.0.0/30	192.168.0.0/16	172.16.1.0/24	*	*	*	WAN address	Auto created rule

Configuration du Firewall

Par défaut PfSense bloque toutes les connections qui sont initié à partir de l'extérieur.

In a default two-interface LAN and WAN configuration, pfSense utilizes default deny on the WAN and default allow on the LAN. Everything inbound from the Internet is denied, and everything out to the Internet from the LAN is permitted. All home grade routers use this methodology, as do all

Fichier de règles /tmp/rules.debug

```
# default deny rules
#-----
block in log inet all tracker 1000000103 label "Default deny rule IPv4"
block out log inet all tracker 1000000104 label "Default deny rule IPv4"
block in log inet6 all tracker 1000000105 label "Default deny rule IPv6"
block out log inet6 all tracker 1000000106 label "Default deny rule IPv6"
```

Ajoute de la possibilité de ping a l'intérieur du LAN

Firewall / Rules / LAN

Floating WAN LAN

Rules (Drag to Change Order)

<input type="checkbox"/>	States	Protocol	Source	Port	Destination	Port	Gateway	Queue	Schedule	Description	Actions
<input type="checkbox"/>	✓ 10 / 370.04 MiB	*	*	*	LAN Address	80 22	*	*		Anti-Lockout Rule	⚙️
<input type="checkbox"/>	✓ 0 / 59 KIB	IPv4 ICMP any	*	*	*	*	*	none		Ping	📌 ✎ 🗑️
<input type="checkbox"/>	✓ 0 / 0 B	IPv4 UDP	*	*	*	123 (NTP)	*	none			📌 ✎ 🗑️
<input type="checkbox"/>	✓ 58 / 34.98 GiB	IPv4 *	*	*	*	*	*	none		Default allow LAN to any rule	📌 ✎ 🗑️
<input type="checkbox"/>	✓ 0 / 0 B	IPv6 *	*	*	*	*	*	none		Default allow LAN IPv6 to any rule	📌 ✎ 🗑️

⬆️ Add ⬇️ Add 🗑️ Delete 💾 Save ➕ Separator