

# Installation Pfsense

## Qu'est-ce que pfSense ?

pfSense est un pare-feu open-source basé sur FreeBSD, conçu pour fournir une plate-forme de sécurité réseau robuste et flexible. Il offre une gamme complète de fonctionnalités de pare-feu, de routage avancé, de VPN, de filtrage de contenu et de surveillance du trafic réseau.

## Configuration requise pour pfSense

**Processeur** : Processeur multi-cœur cadencé à 500 MHz ou plus.

**Mémoire RAM** : 1 Go de RAM ou plus.

**Stockage** : Disque dur d'au moins 8 Go.

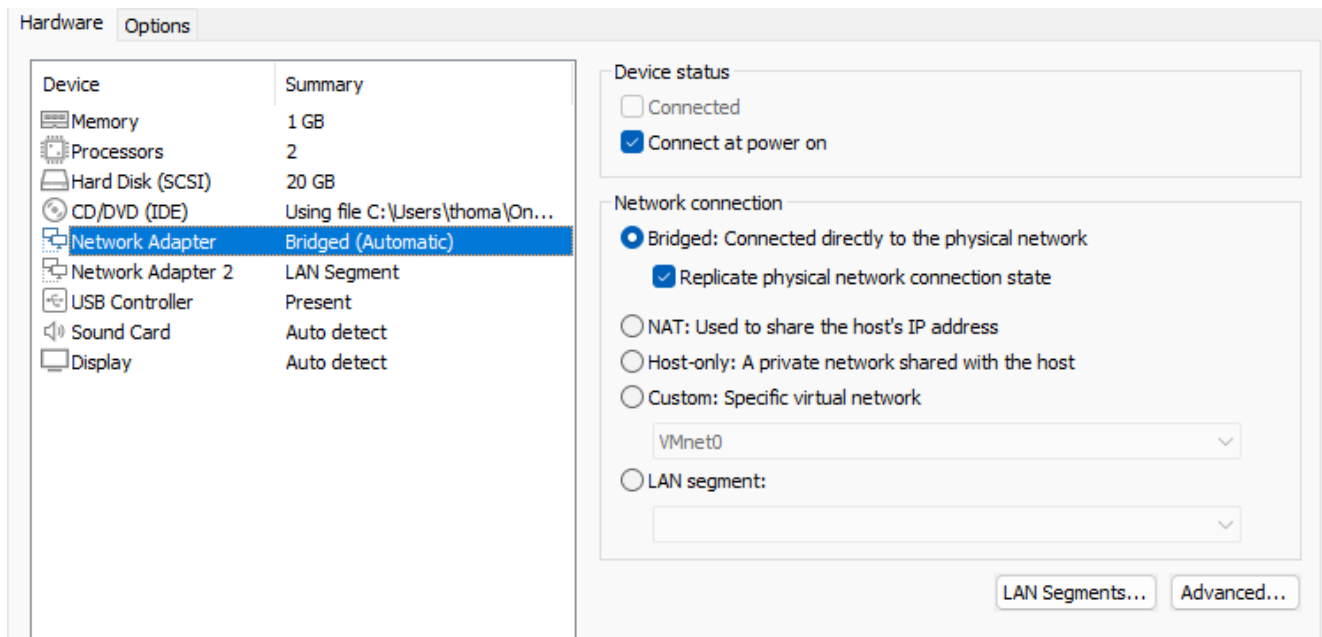
**Cartes Réseau** : Deux interfaces réseau Ethernet.

## Installation pfSense

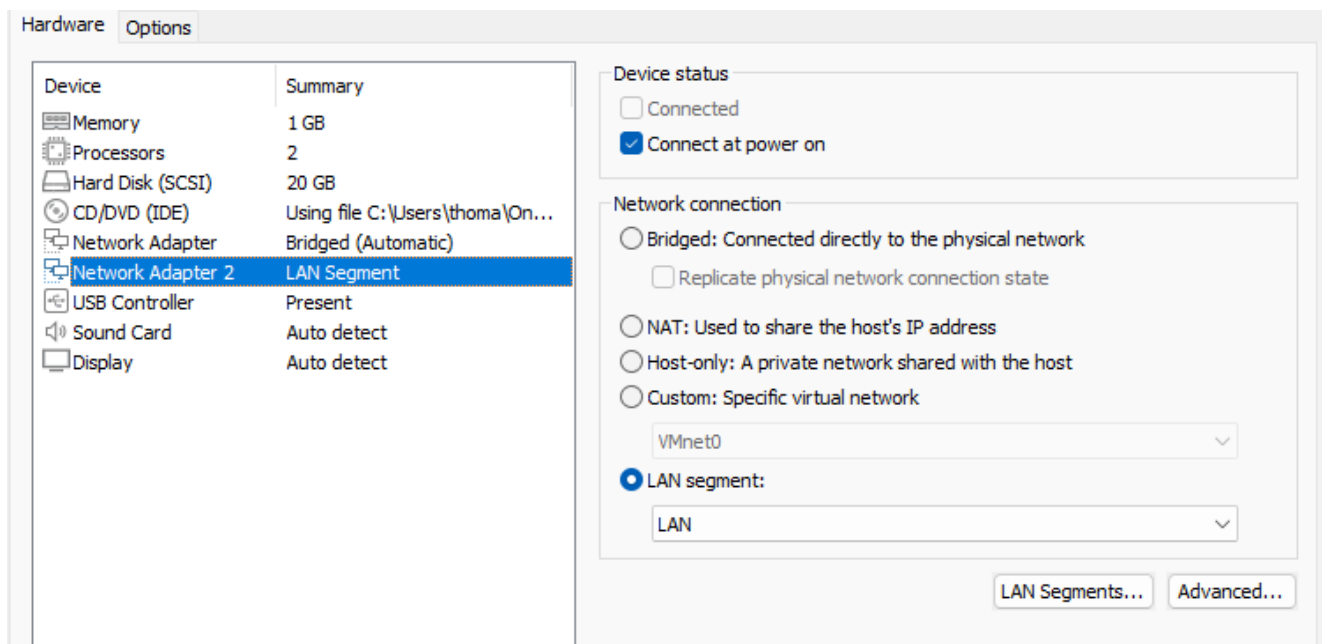
### Configuration VMWARE Pro Workstation

Device	Summary
Memory	1 GB
Processors	2
Hard Disk (SCSI)	20 GB
CD/DVD (IDE)	Using file C:\Users\thoma\On...
Network Adapter	Bridged (Automatic)
Network Adapter 2	LAN Segment
USB Controller	Present
Sound Card	Auto detect
Display	Auto detect

- Première carte réseaux en Bridge ou en NAT

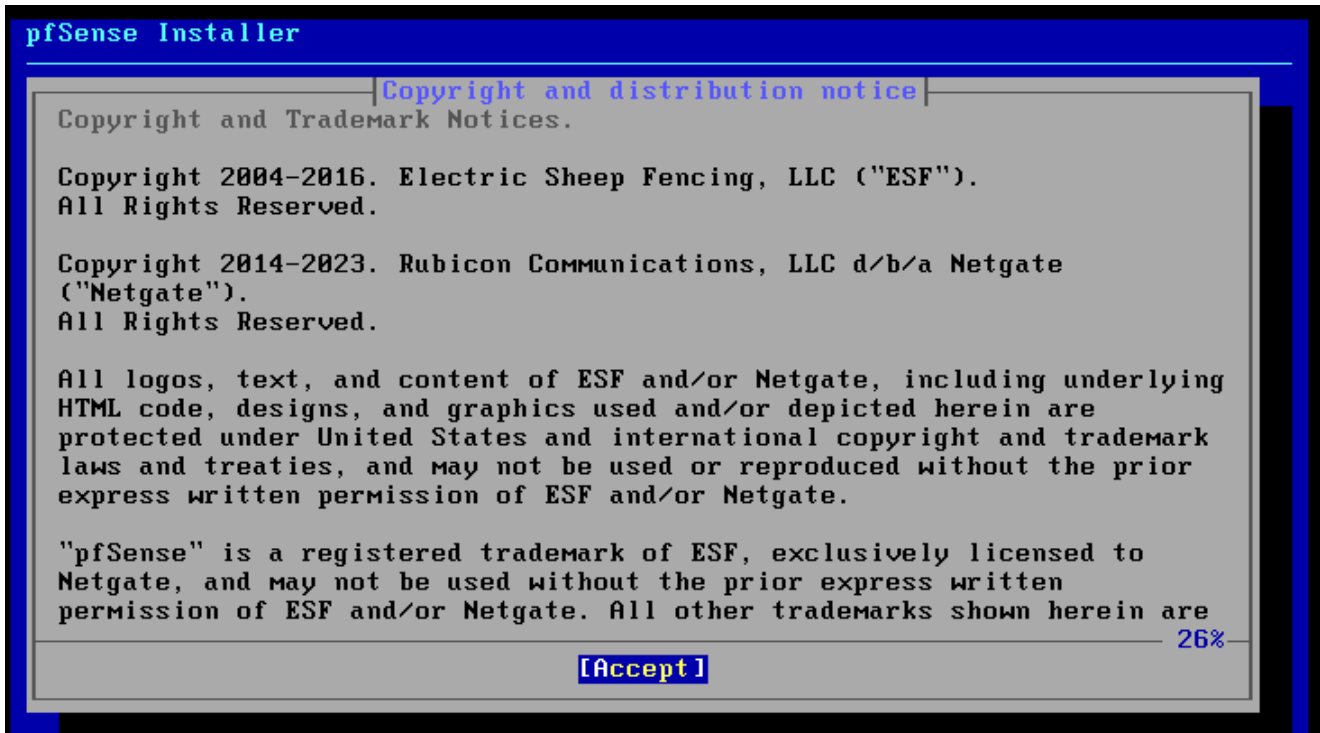


- Deuxième carte réseau sur le lan segment



Installation pfSense

- On tape « entrée »



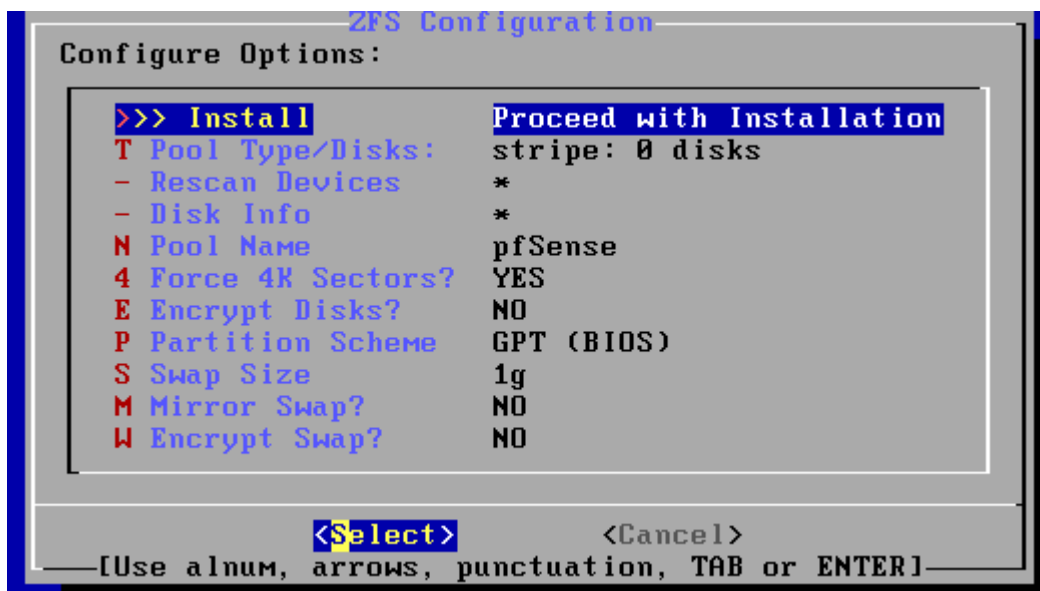
- Tape « entrée » pour installer pfSense



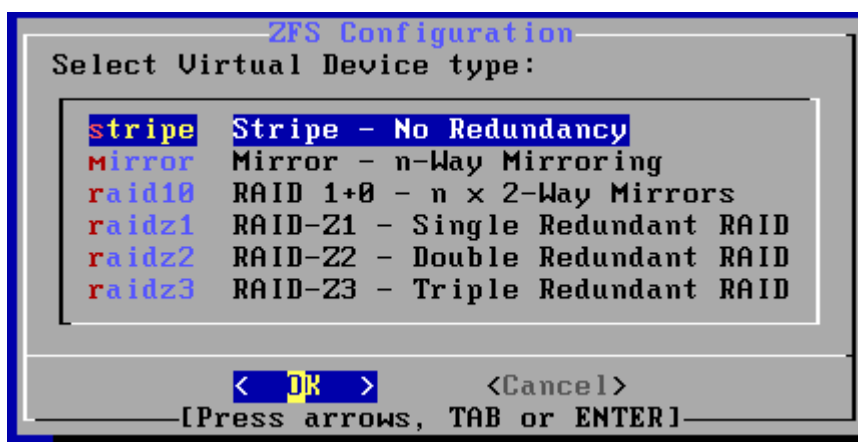
- Sélectionner auto UFS



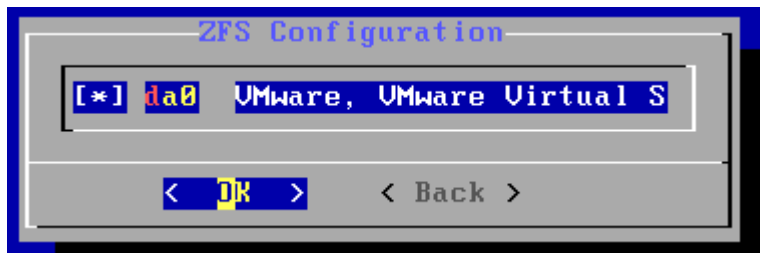
- Tape « entrée » pour install



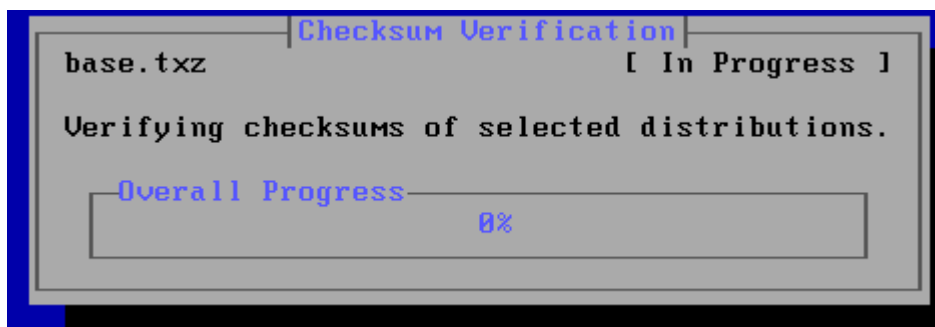
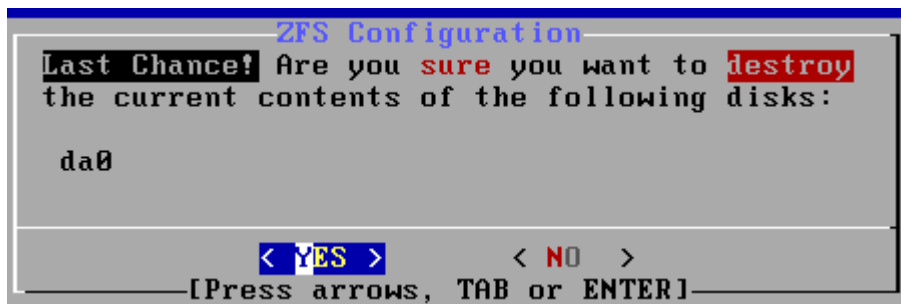
Aucune redondance nécessaire car nous somme en machine virtuelle



- On tape barre espace pour cocher la case puis entrer



- Tape « entrée » pour valider



pfSense 2.7.2-RELEASE amd64 20231206-2010  
Bootup complete

FreeBSD/amd64 (pfSense.home.arp) (ttyv0)

VMware Virtual Machine - Netgate Device ID: 16584549370c5a12752c

\*\*\* Welcome to pfSense 2.7.2-RELEASE (amd64) on pfSense \*\*\*

WAN (wan)           -> em0           -> v4/DHCP4: 192.168.87.21/24  
  v6/DHCP6: fd28:97e7:8af2:f3f3:20c:29ff:fe52:43  
e4/64  
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: █

```
pfSense 2.7.2-RELEASE amd64 20231206-2010
Bootup complete

FreeBSD/amd64 (pfSense.home.arp) (ttyv0)

VMware Virtual Machine - Netgate Device ID: 16584549370c5a12752c

*** Welcome to pfSense 2.7.2-RELEASE (amd64) on pfSense ***

WAN (wan)      -> em0      -> v4/DHCP4: 192.168.87.21/24
                                v6/DHCP6: fd28:97e7:8af2:f3f3:20c:29ff:fe52:43
e4/64
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: █
```

## Paramétrage Pfsense patte Wan/LAN

---

Une fois Pfsense installer nous devons configurer les pattes Wan et Lan :

### Configuration de la patte WAN

On sélectionne l'option 2 : on tape 2

Puis également le port WAN : on tape 1

On laisse l'IPv4 être géré par le DHCP car c'est notre accès Internet. Donc on tape « y »

Mais on désactive l'IPv6 pour éviter toute perturbation entre les deux protocoles.

Il nous propose le protocole DHCP pour l'IPv6 on refuse « n »

Et on presse « entrée » sans inscrire d'adresse IPV6

```

WAN (wan)      -> em0      -> v4/DHCP4: 192.168.87.21/24
LAN (lan)      -> em1      -> v4: 192.168.10.254/24

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: 2

Available interfaces:

```

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

```

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

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

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

- Passerelle wan est automatique en dhcp
- On presse entrer pour affecter aucune adresse IPV6

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

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

>



## Configuration de la patte LAN

```
pfSense 2.7.2-RELEASE amd64 20231206-2010
Bootup complete

FreeBSD/amd64 (pfSense.home.arpa) (ttyv0)

VMware Virtual Machine - Netgate Device ID: 16584549370c5a12752c

*** Welcome to pfSense 2.7.2-RELEASE (amd64) on pfSense ***

WAN (wan)      -> em0      -> v4/DHCP4: 192.168.87.21/24
                                v6/DHCP6: fd28:97e7:8af2:f3f3:20c:29ff:fe52:43
e4/64
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: █
```

On sélectionne l'option 2 : on tape 2

Puis également le port LAN : on tape 2

On ne veut pas que le port soit paramétré par DHCP : on tape N (le but étant que l'ip du serveur soit fixe)

```

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: 2

Available interfaces:

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

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

Configure IPv4 address LAN interface via DHCP? (y/n) n

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

```

On tape l'adresse IP voulu (tout collé)

```

Enter the new LAN IPv4 address. Press <ENTER> for none:
> 192.168.10.254/24

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

```

Ensuite nous désactivons l'IPV6 de la patte LAN.

On tape « n »

Puis entrer sans mettre d'adresse

**On ne souhaite pas que notre port LAN soit notre passerelle internet c'est un port interne**

**Enfin on tape « n »**

Available interfaces:

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

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

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

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

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

Disabling IPv4 DHCPD...

Disabling IPv6 DHCPD...

Please wait while the changes are saved to WAN...

Reloading filter...

Reloading routing configuration...

DHCPD...^I

The IPv4 WAN address has been set to dhcp

Press <ENTER> to continue. █

- Taper « n » on veut rester en https

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

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

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

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

Enter the start address of the IPv4 client address range: 192.168.1.10

Enter the end address of the IPv4 client address range: 192.168.1.220

Disabling IPv6 DHCPD...

Please wait while the changes are saved to LAN...

Reloading filter...

Reloading routing configuration...

DHCPD...

The IPv4 LAN address has been set to 192.168.1.254/24

You can now access the webConfigurator by opening the following URL in your web browser:

<http://192.168.1.254/>

Press <ENTER> to continue. █

Reloading routing configuration...  
DHCPD...

The IPv4 WAN address has been set to dhcp

Press <ENTER> to continue. VMware Virtual Machine - Netgate Device ID: 176dbcd37b07ef10d144

\*\*\* Welcome to pfSense 2.7.2-RELEASE (amd64) on pfSense \*\*\*

WAN (wan)       -> em0           -> v4/DHCP4: 192.168.43.25/24  
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: █