# OPNSENSE

- Installation de PFSENSE sur PROXMOX

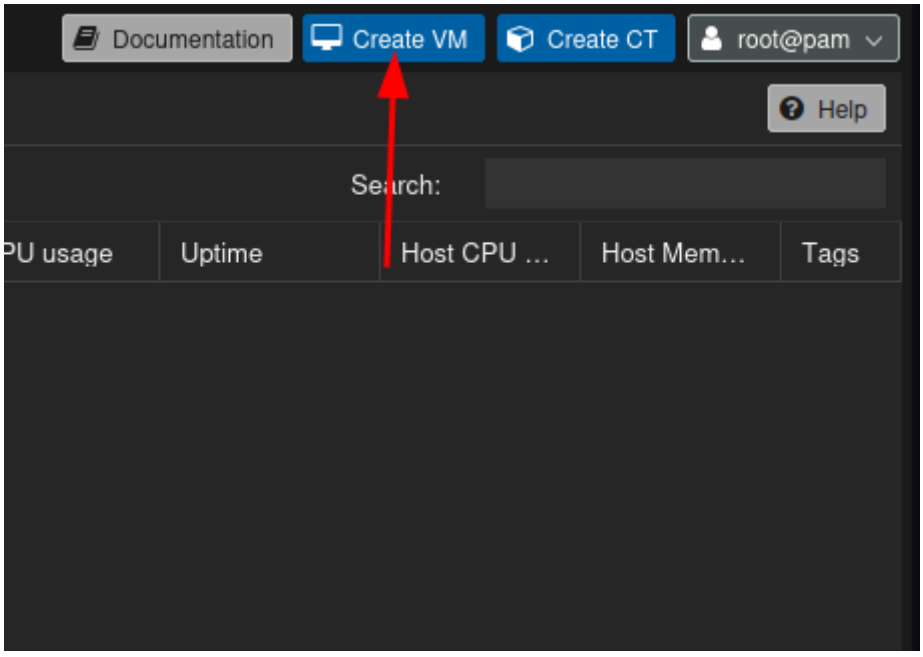
# Installation de PFSENSE sur PROXMOX

## Prérequis:

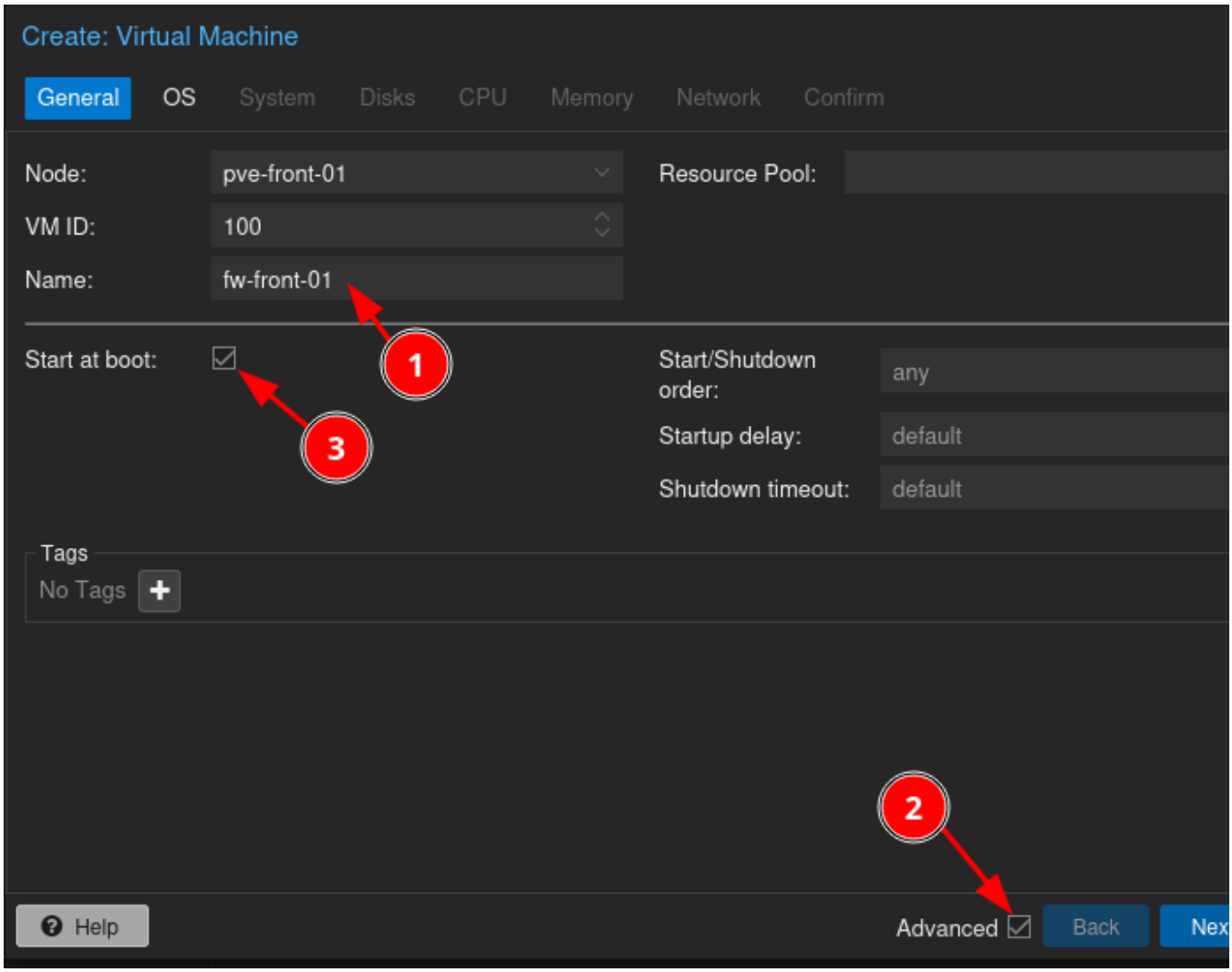
- Avoir PROXMOX installé
- Avoir l'ISO de Pfsense (https://www.pfsense.org/download/)
- Proxmox doit avoir accès à internet depuis proxmox

## Création de la VM:

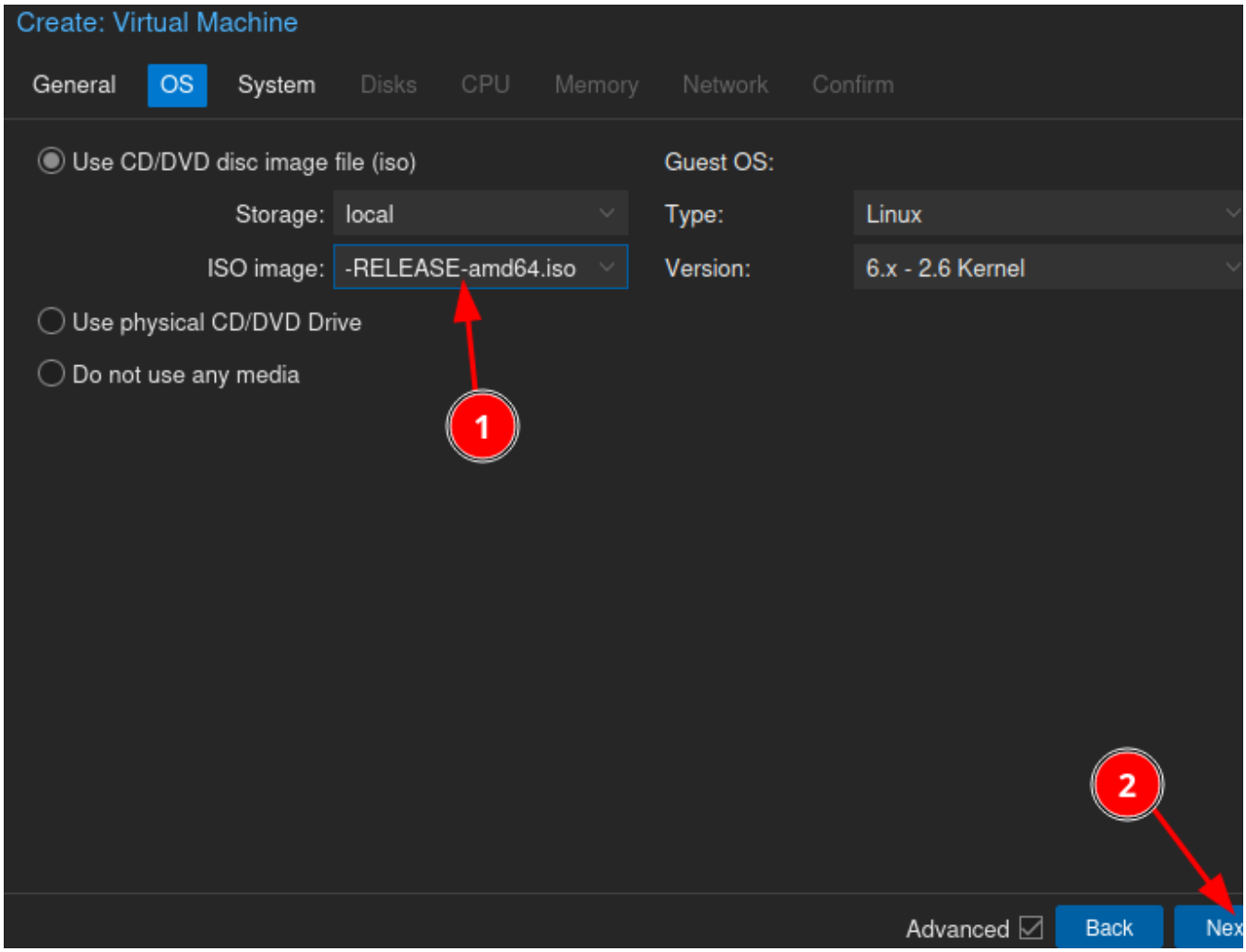
1. Créer la VM



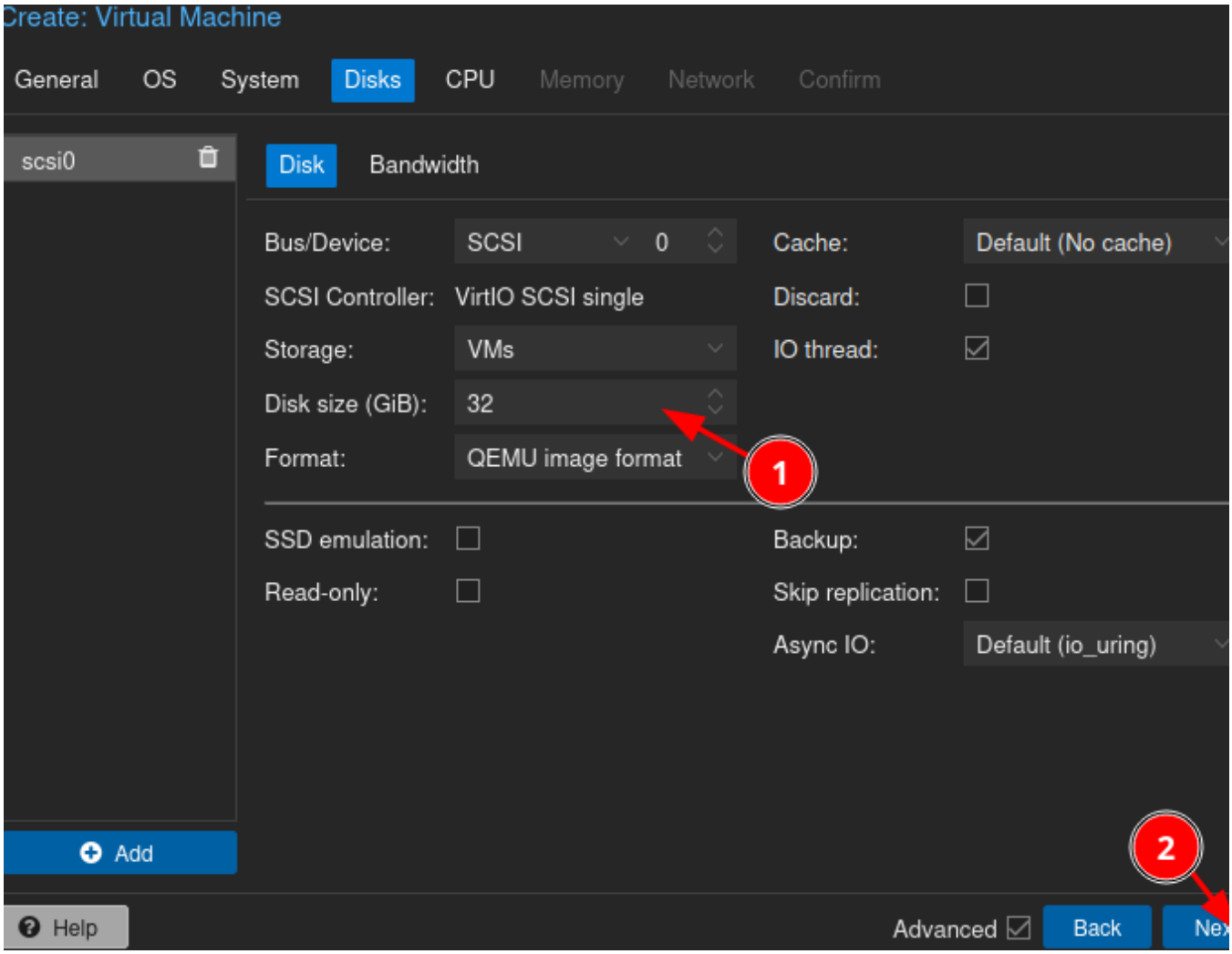

2. Paramètres généraux


Create: Virtual Machine
General
OS
System
Disks
CPU
Memory
Network
Confirm
Node:
pve-front-01
Resource Pool:
VM ID:
100
Name:
fw-front-01
Start at boot:
Start/Shutdown order:
any
Startup delay:
default
Shutdown timeout:
default
Tags
No Tags
1
2
3
Help
Advanced
Back
Nex

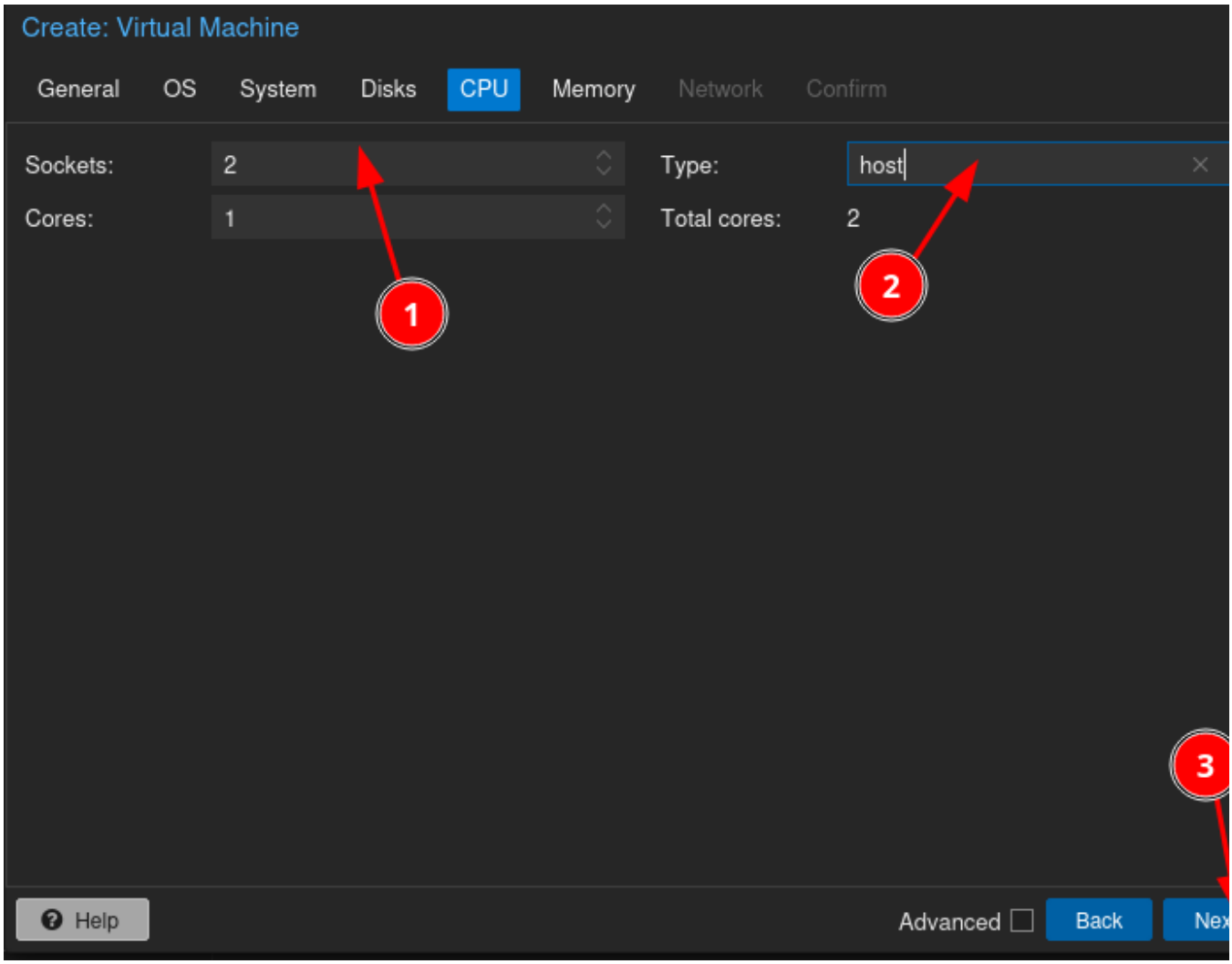
3. Os



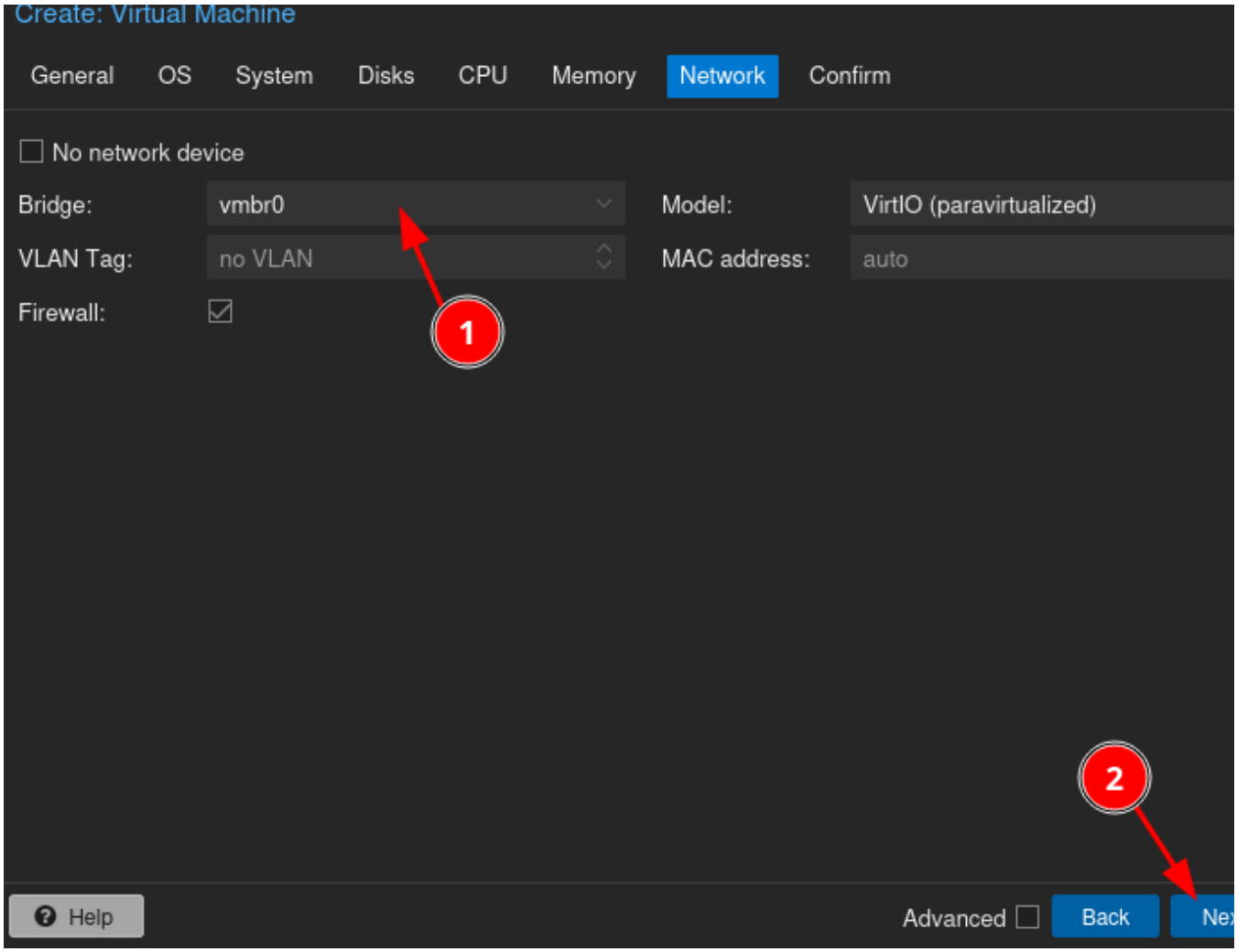

4. La partie système peut être passée
5. Disque


Create: Virtual Machine
General
OS
System
Disks
CPU
Memory
Network
Confirm
scsi0
Disk
Bandwidth
Bus/Device:
SCSI
0
Cache:
Default (No cache)
SCSI Controller:
VirtIO SCSI single
Discard:
Storage:
VMs
IO thread:
Disk size (GiB):
32
Format:
QEMU image format
1
SSD emulation:
Backup:
Read-only:
Skip replication:
Async IO:
Default (io_uring)
Add
2
Help
Advanced
Back
Nex

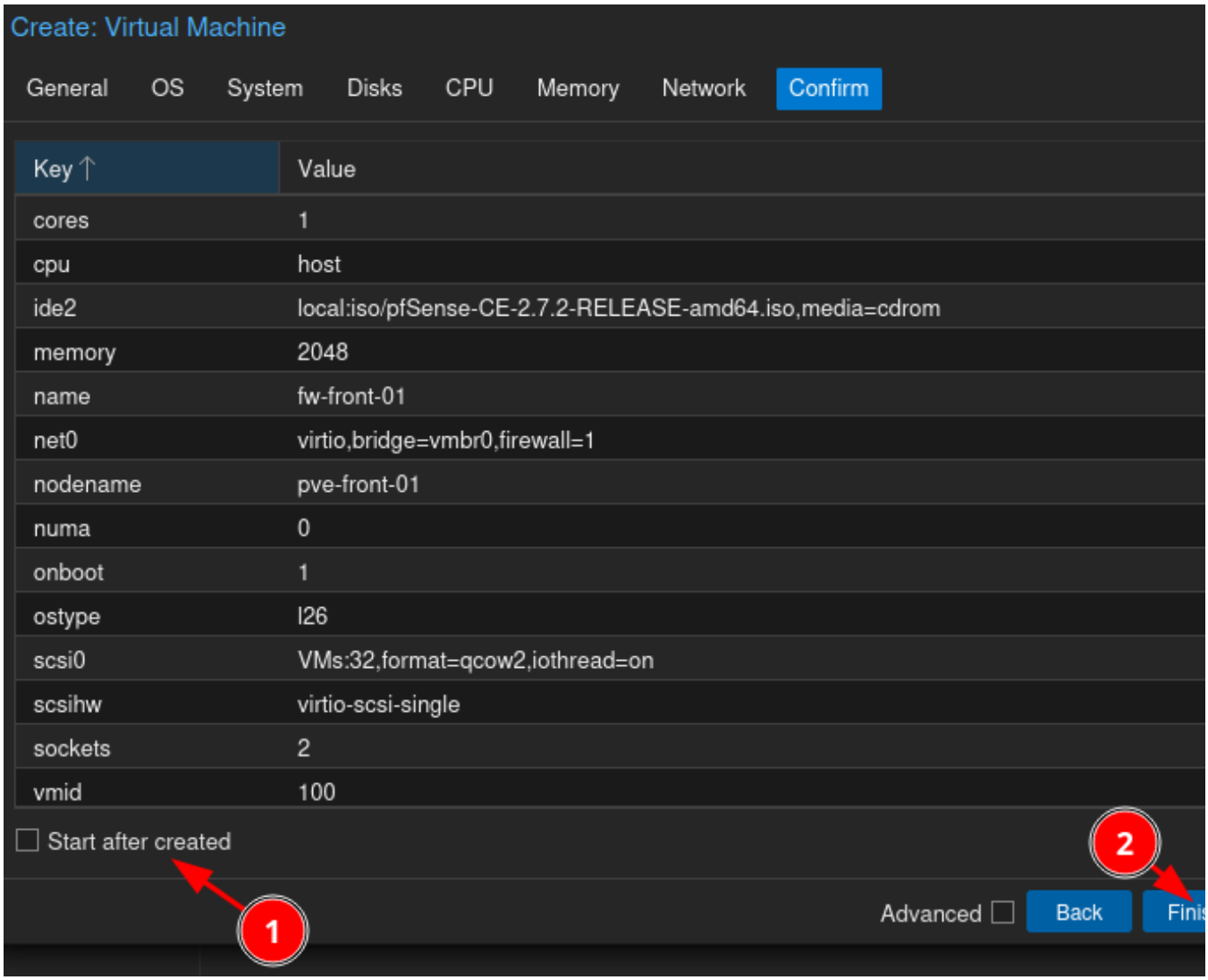
6. CPU



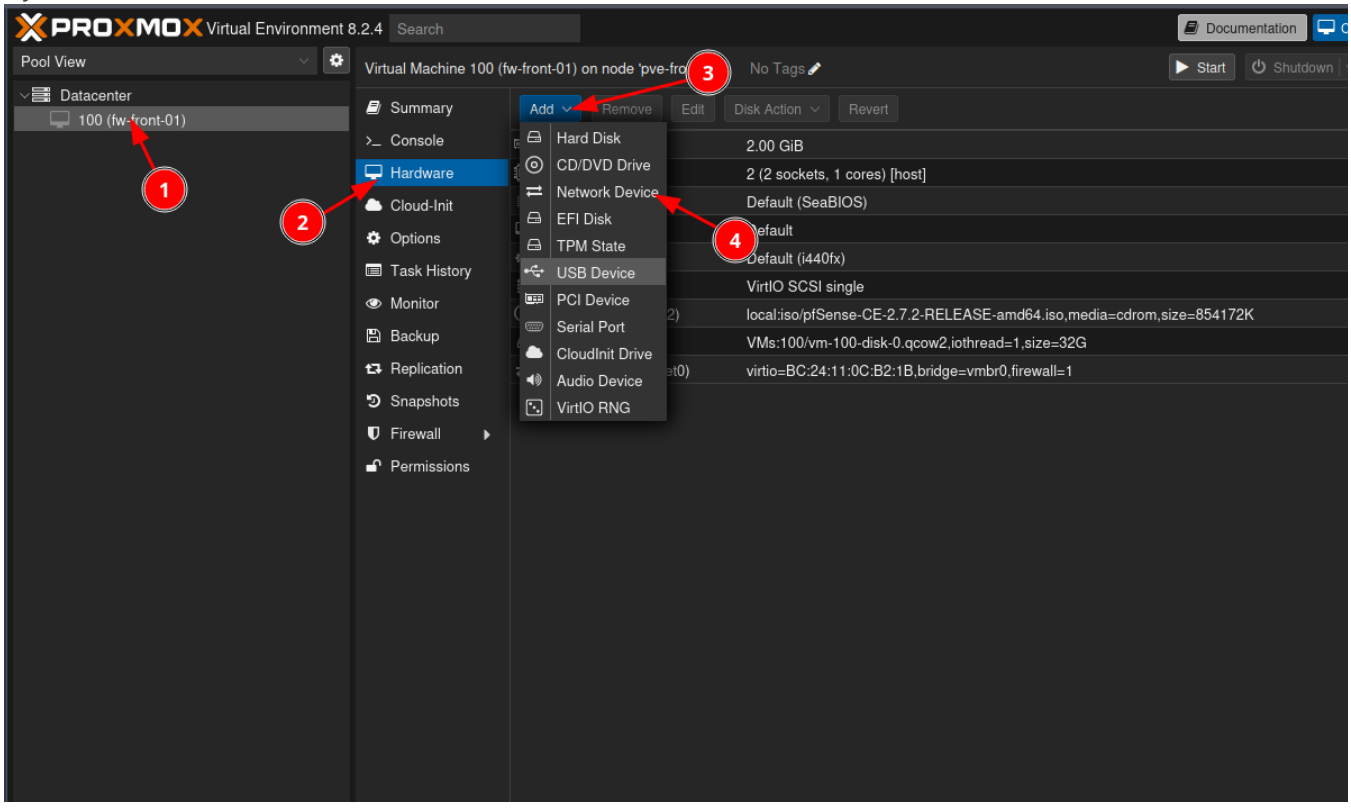

7. RAM peut être laissée à 2048 (2Go)
8. Réseau doit être laissé sur vmbr0 car c'est grâce a cette interface que le firewall aura accès à internet

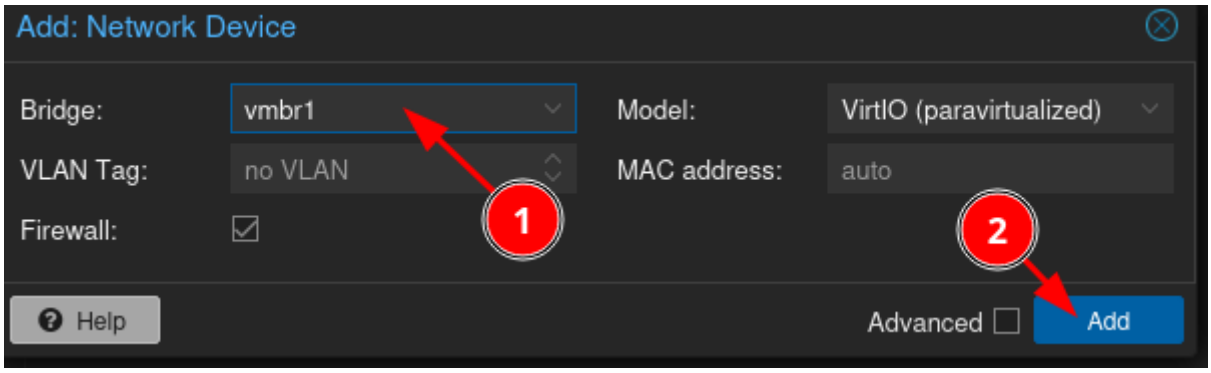



9. Ne pas démarrer la machine à la fin de l'installation



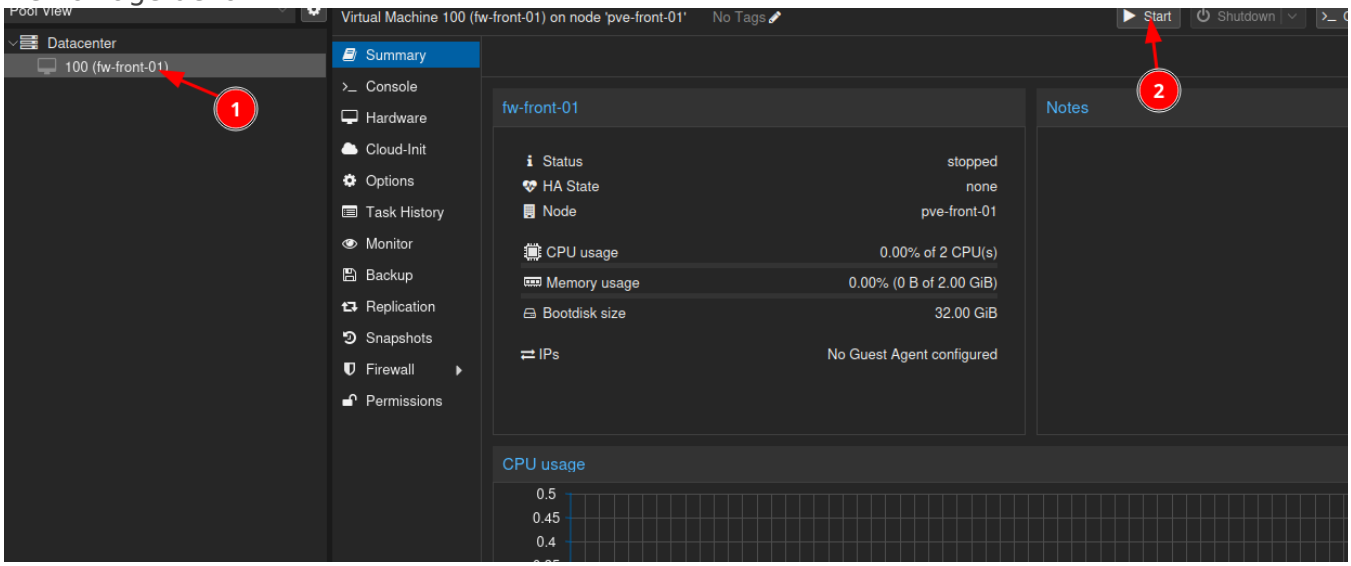

10. Ajouter une carte réseau à la VM



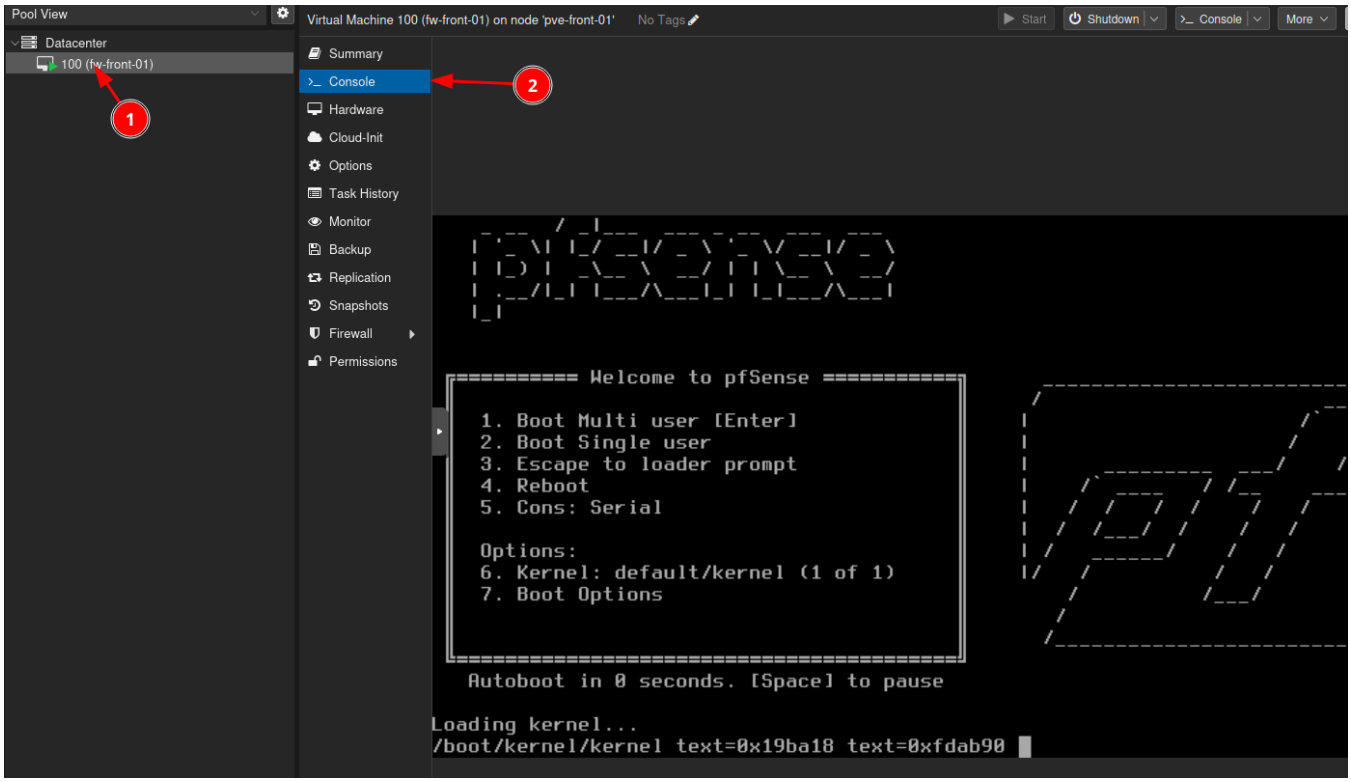



# Premier démarrage:

1. Démarrage de la VM

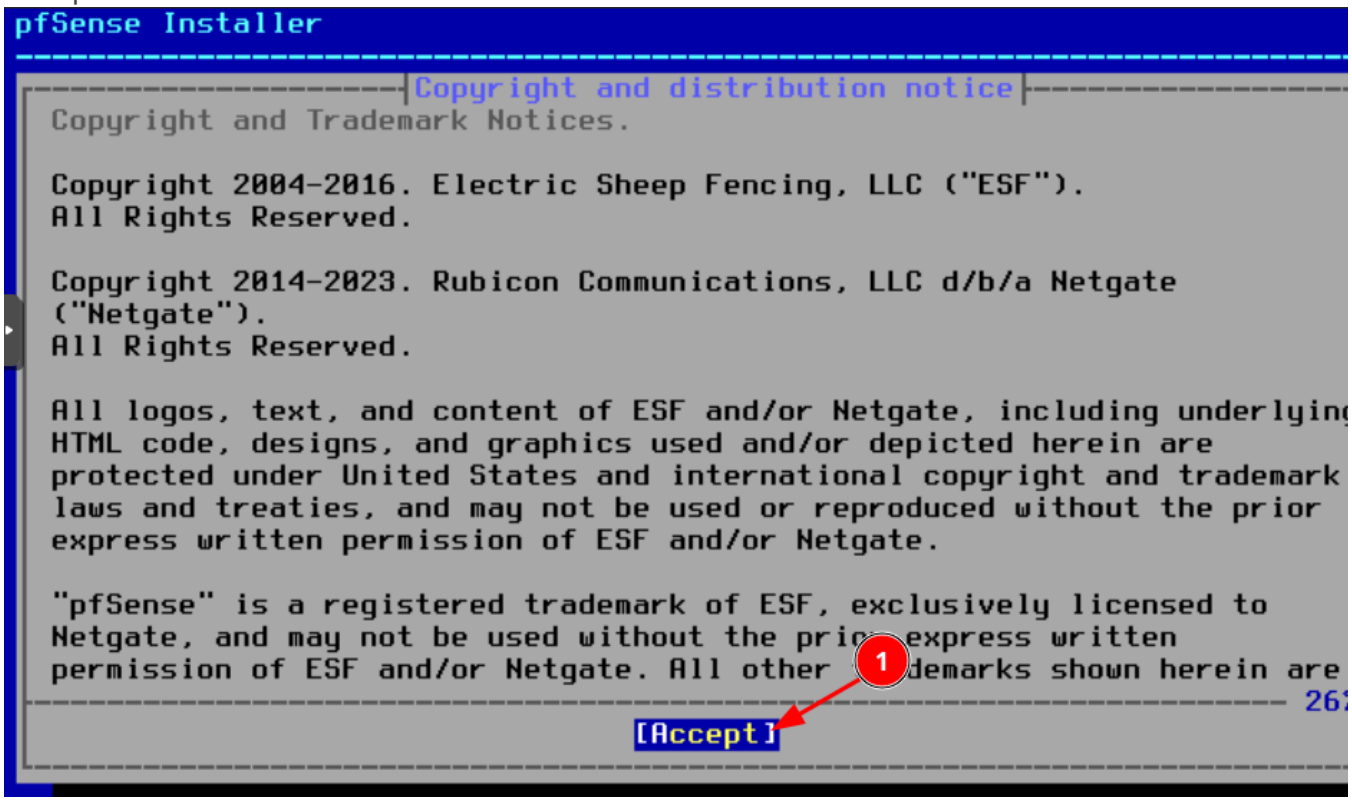



2. Se rendre sur la console

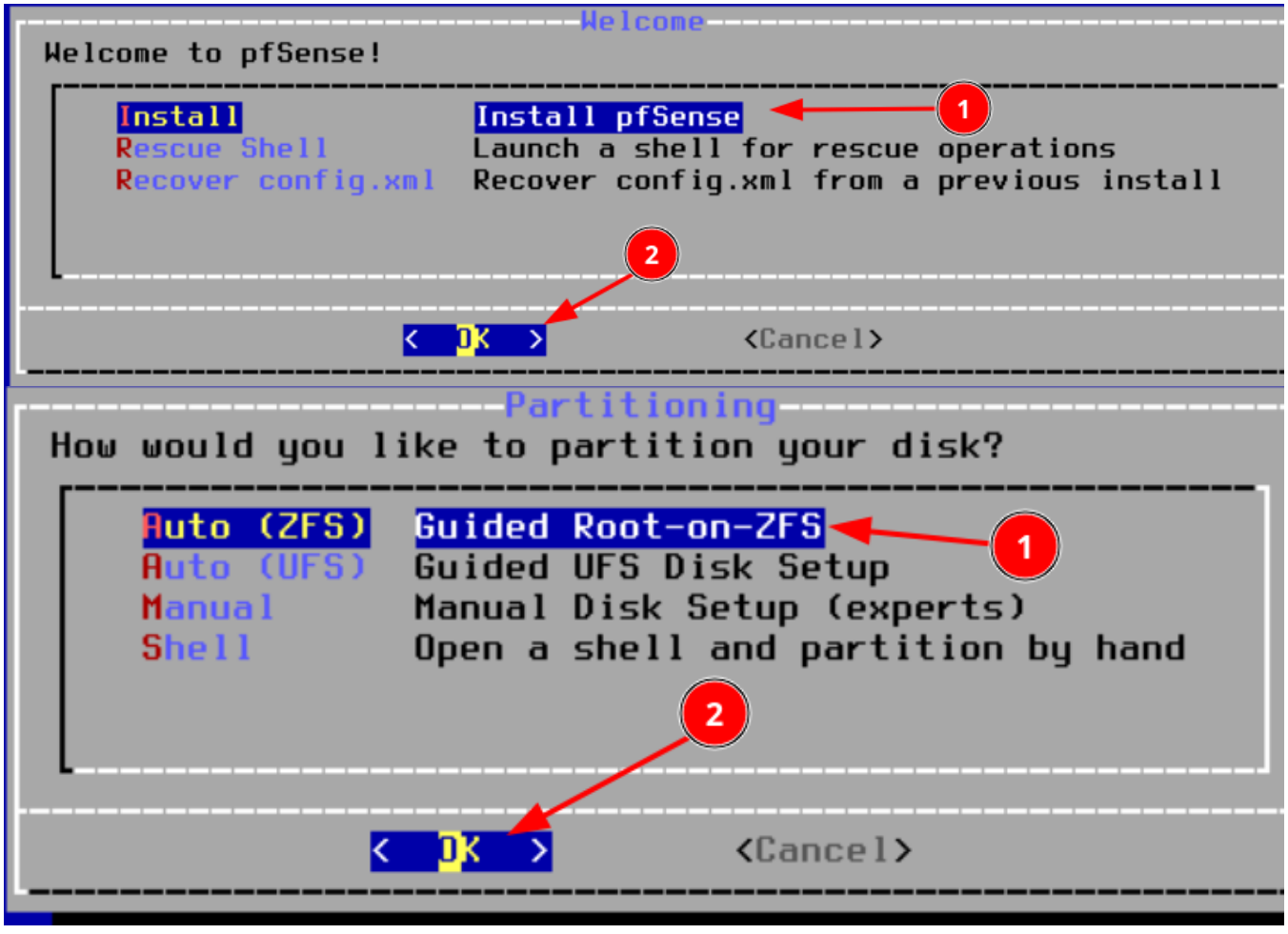


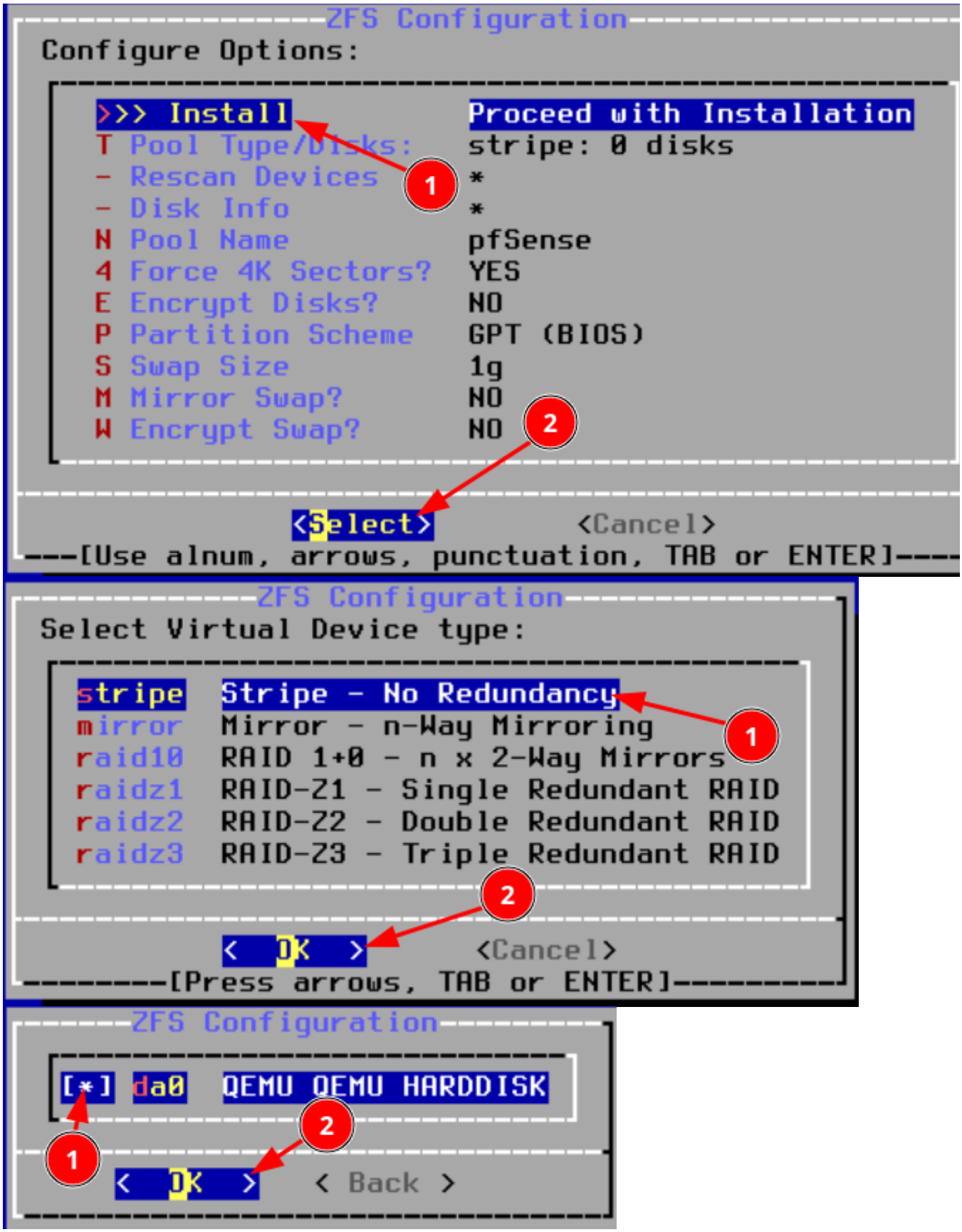

3. Attendre que l'ISO boot

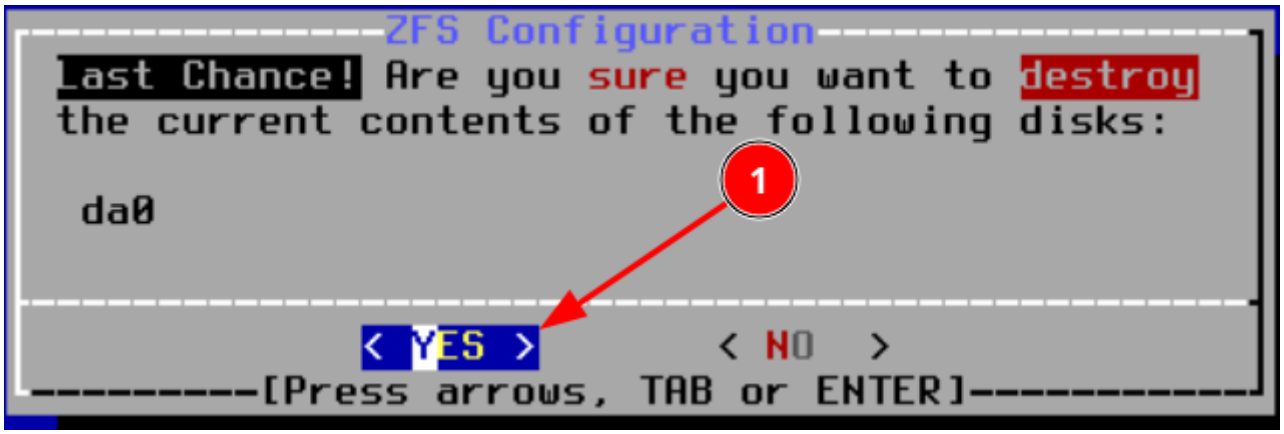
4. Accepter le contrat de licence




5. Installer Pfsense



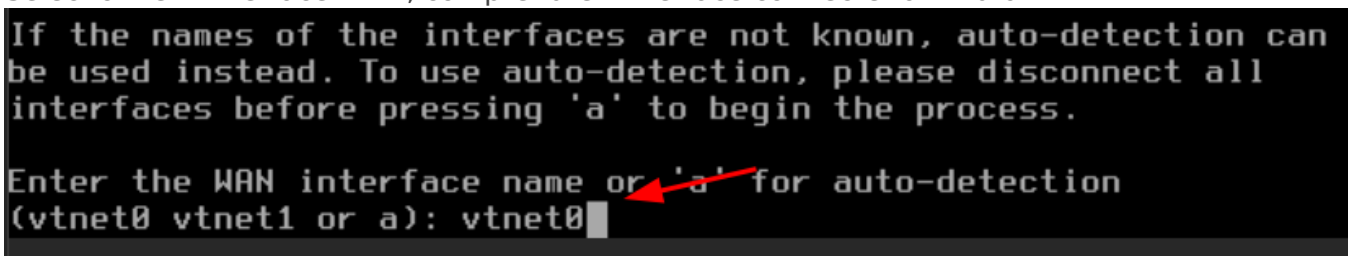

ZFS Configuration
Configure Options:
>>> Install
Proceed with Installation
T Pool Type/Disks:
stripe: 0 disks
- Rescan Devices
*
- Disk Info
*
N Pool Name
pfSense
4 Force 4K Sectors?
YES
E Encrypt Disks?
NO
P Partition Scheme
GPT (BIOS)
S Swap Size
1g
M Mirror Swap?
NO
W Encrypt Swap?
NO
1
2
<Select>
<Cancel>
[Use alnum, arrows, punctuation, TAB or ENTER]
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
1
2
< OK >
<Cancel>
[Press arrows, TAB or ENTER]
ZFS Configuration
[*] da0 QEMU QEMU HARDDISK
1
2
< OK >
< Back >



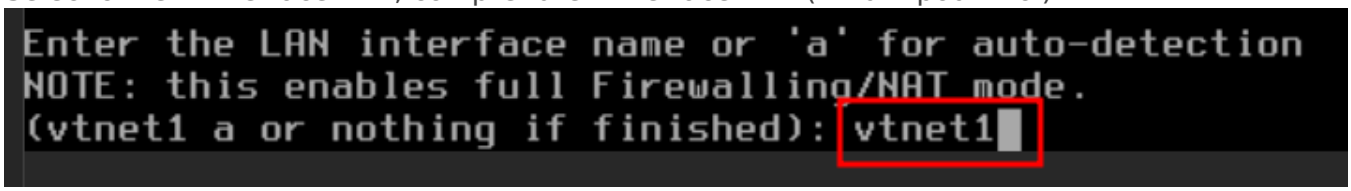

6. Attendre la fin de l'installation

# Paramétrage du réseau:

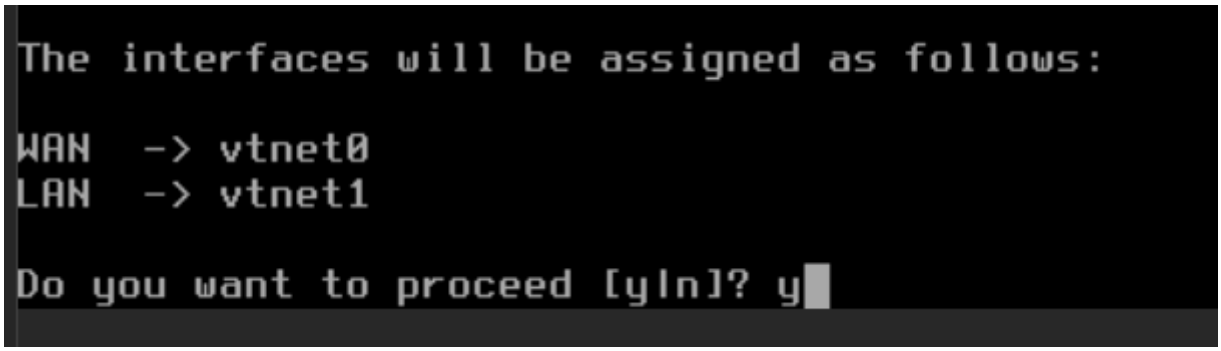
1. Sélectionner l'interface WAN, comprendre l'interface connecter à vmbr0



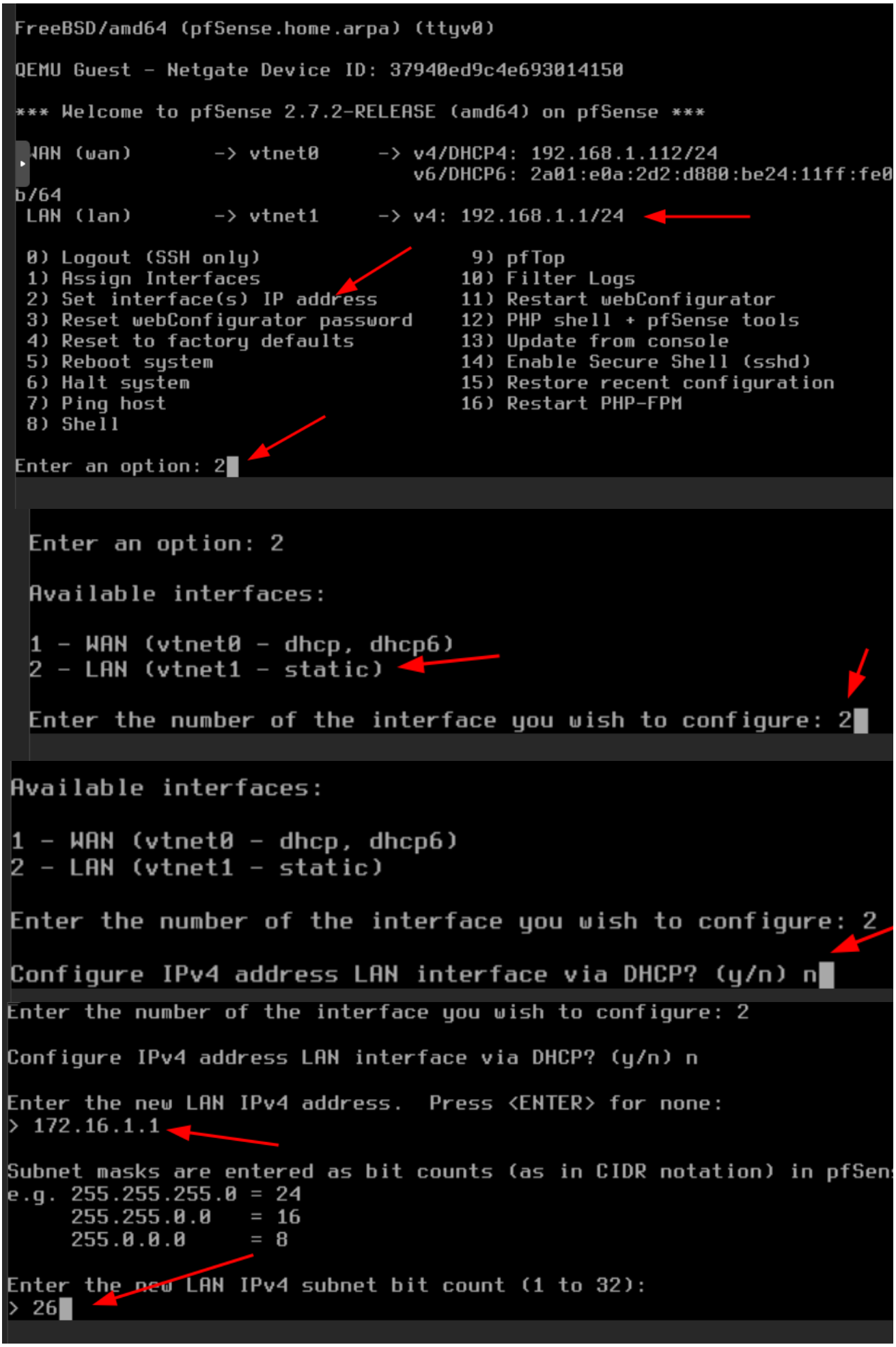

2. Sélectionner l'interface LAN, comprendre l'interface LAN (vmbr1 pour moi)

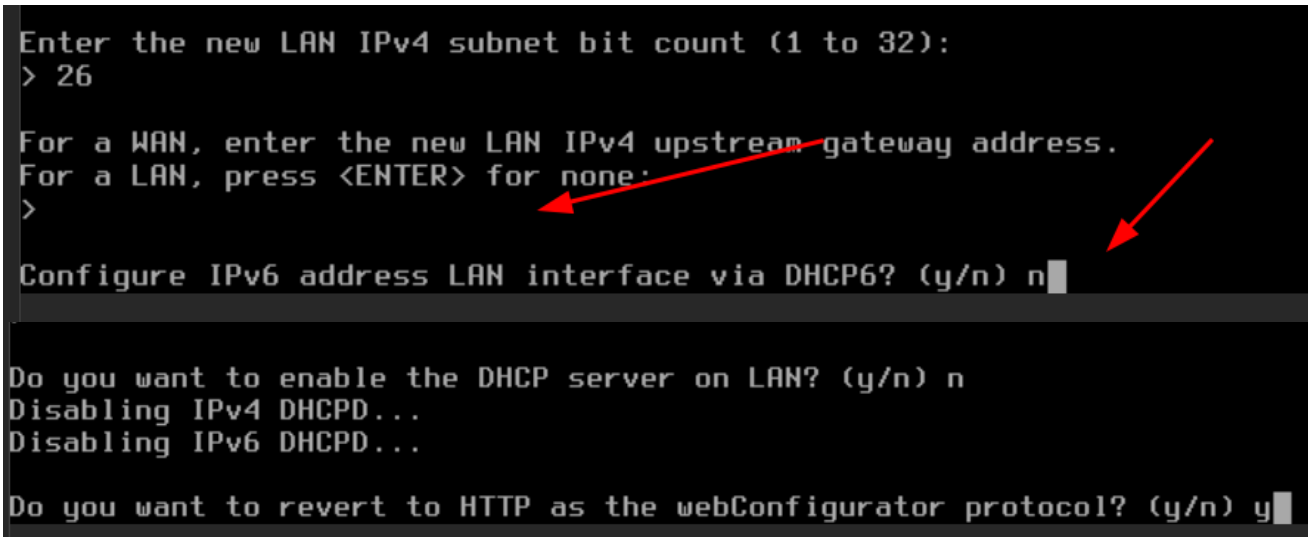



3. Valider

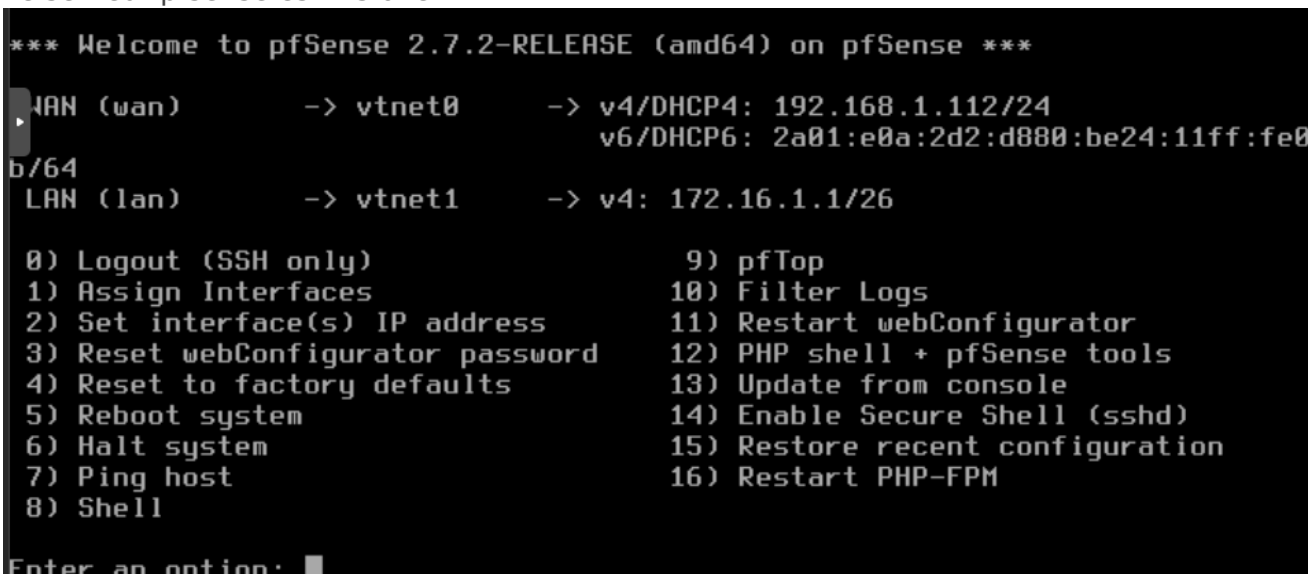



4. Paramétrer les IPs des deux interfaces, pour moi la WAN est en DHCP donc pas besoin de la configurer pour moi
   - Paramétrage de l'interface LAN


FreeBSD/amd64 (pfSense.home.arpa) (ttyv0)
QEMU Guest - Netgate Device ID: 37940ed9c4e693014150
*** Welcome to pfSense 2.7.2-RELEASE (amd64) on pfSense ***
WAN (wan) -> vtnet0 -> v4/DHCP4: 192.168.1.112/24
v6/DHCP6: 2a01:e0a:2d2:d880:be24:11ff:fe0
b/64
LAN (lan) -> vtnet1 -> v4: 192.168.1.1/24
0) Logout (SSH only)
1) Assign Interfaces
2) Set interface(s) IP address
3) Reset webConfigurator password
4) Reset to factory defaults
5) Reboot system
6) Halt system
7) Ping host
8) Shell
9) pfTop
10) Filter Logs
11) Restart webConfigurator
12) PHP shell + pfSense tools
13) Update from console
14) Enable Secure Shell (sshd)
15) Restore recent configuration
16) Restart PHP-FPM
Enter an option: 2
Enter an option: 2
Available interfaces:
1 - WAN (vtnet0 - dhcp, dhcp6)
2 - LAN (vtnet1 - static)
Enter the number of the interface you wish to configure: 2
Available interfaces:
1 - WAN (vtnet0 - dhcp, dhcp6)
2 - LAN (vtnet1 - static)
Enter the number of the interface you wish to configure: 2
Configure IPv4 address LAN interface via DHCP? (y/n) n
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:
> 172.16.1.1
Subnet masks are entered as bit counts (as in CIDR notation) in pfSen
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):
> 26




- Le serveur pfsense est installé




> Il vous suffit d'accéder à pfsense sur l'interface WAN.
> Si ça ne fonctionne pas il faudra alors désactiver le firewall:
> Sur la console:
> `pfctl -d`
> User: admin
> mot de passe: pfsense