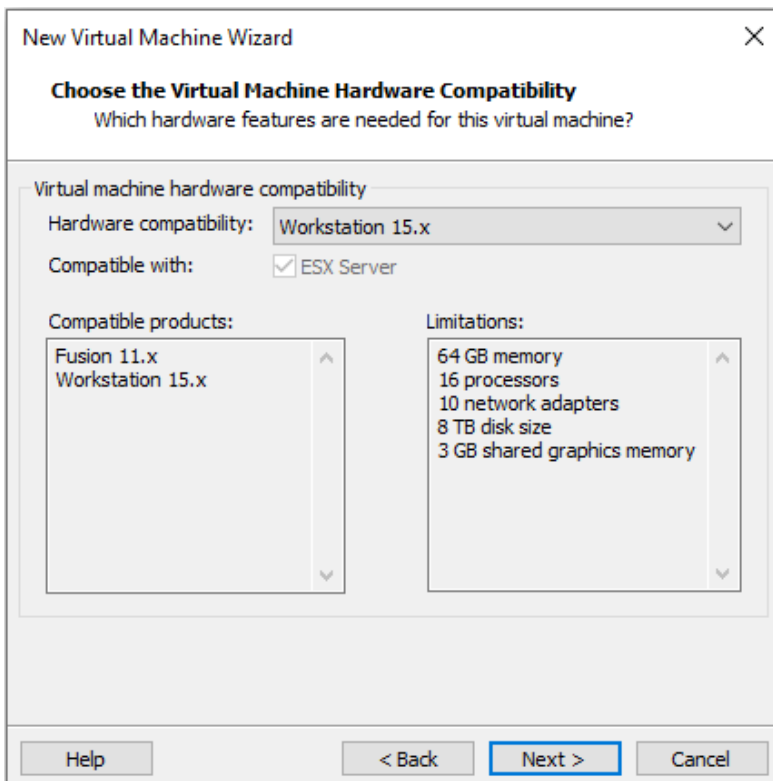


# Pfsense



New Virtual Machine Wizard ✕

**Guest Operating System Installation**  
A virtual machine is like a physical computer; it needs an operating system. How will you install the guest operating system?

Install from:

Installer disc:  
No drives available

Installer disc image file (iso):  
C:\Users\PC-SISR\Desktop\iso\pfSense-CE-2.6.0-RELI Browse...  
i FreeBSD version 10 and earlier 64-bit detected.

I will install the operating system later.  
The virtual machine will be created with a blank hard disk.

Help < Back Next > Cancel

New Virtual Machine Wizard ✕

**Name the Virtual Machine**  
What name would you like to use for this virtual machine?

Virtual machine name:  
FreeBSD version 10 and earlier 64-bit

Location:  
C:\Users\PC-SISR\Documents\Virtual Machines\FreeBSD version Browse...  
The default location can be changed at Edit > Preferences.

< Back Next > Cancel

New Virtual Machine Wizard



**Processor Configuration**

Specify the number of processors for this virtual machine.

Processors

Number of processors:

Number of cores per processor:

Total processor cores: 4

Help < Back Next > Cancel

New Virtual Machine Wizard



**Memory for the Virtual Machine**

How much memory would you like to use for this virtual machine?

Specify the amount of memory allocated to this virtual machine. The memory size must be a multiple of 4 MB.

Memory for this virtual machine:  MB

64 GB -  
32 GB -  
16 GB -  
8 GB -  
4 GB -  
2 GB -  
1 GB -  
512 MB -  
256 MB -  
128 MB -  
64 MB -  
32 MB -  
16 MB -  
8 MB -  
4 MB -

Maximum recommended memory: 13.3 GB

Recommended memory: 256 MB

Guest OS recommended minimum: 32 MB

Help < Back Next > Cancel

New Virtual Machine Wizard ✕

**Network Type**  
What type of network do you want to add?

Network connection

- Use bridged networking  
Give the guest operating system direct access to an external Ethernet network. The guest must have its own IP address on the external network.
- Use network address translation (NAT)  
Give the guest operating system access to the host computer's dial-up or external Ethernet network connection using the host's IP address.
- Use host-only networking  
Connect the guest operating system to a private virtual network on the host computer.
- Do not use a network connection

Help   < Back   **Next >**   Cancel

New Virtual Machine Wizard ✕

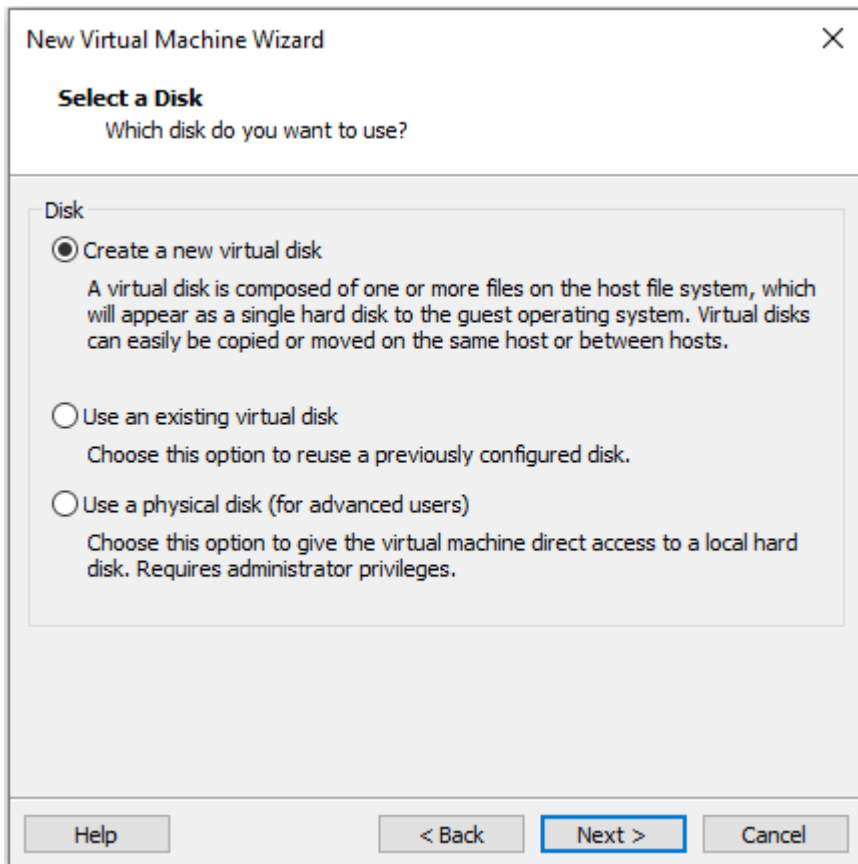
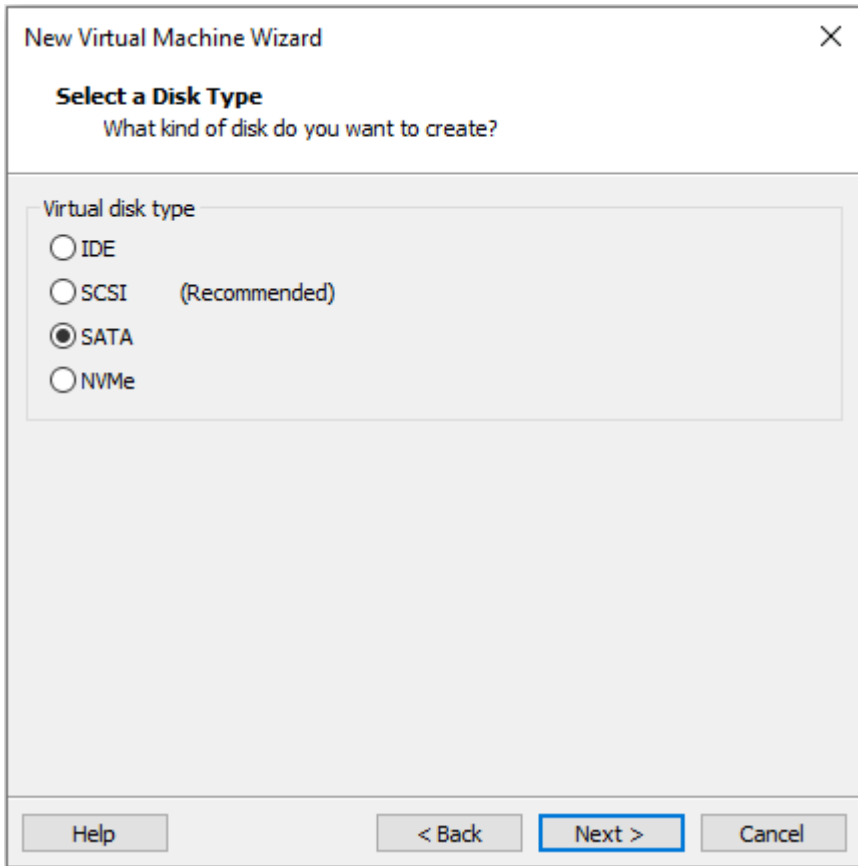
**Select I/O Controller Types**  
Which SCSI controller type would you like to use?

I/O controller types

SCSI Controller:

- BusLogic (Not available for 64-bit guests)
- LSI Logic (Recommended)
- LSI Logic SAS
- Paravirtualized SCSI

Help   < Back   **Next >**   Cancel



New Virtual Machine Wizard ✕

**Specify Disk Capacity**  
How large do you want this disk to be?

Maximum disk size (GB):

Recommended size for FreeBSD version 10 and earlier 64-bit: 20 GB

Allocate all disk space now.  
Allocating the full capacity can enhance performance but requires all of the physical disk space to be available right now. If you do not allocate all the space now, the virtual disk starts small and grows as you add data to it.

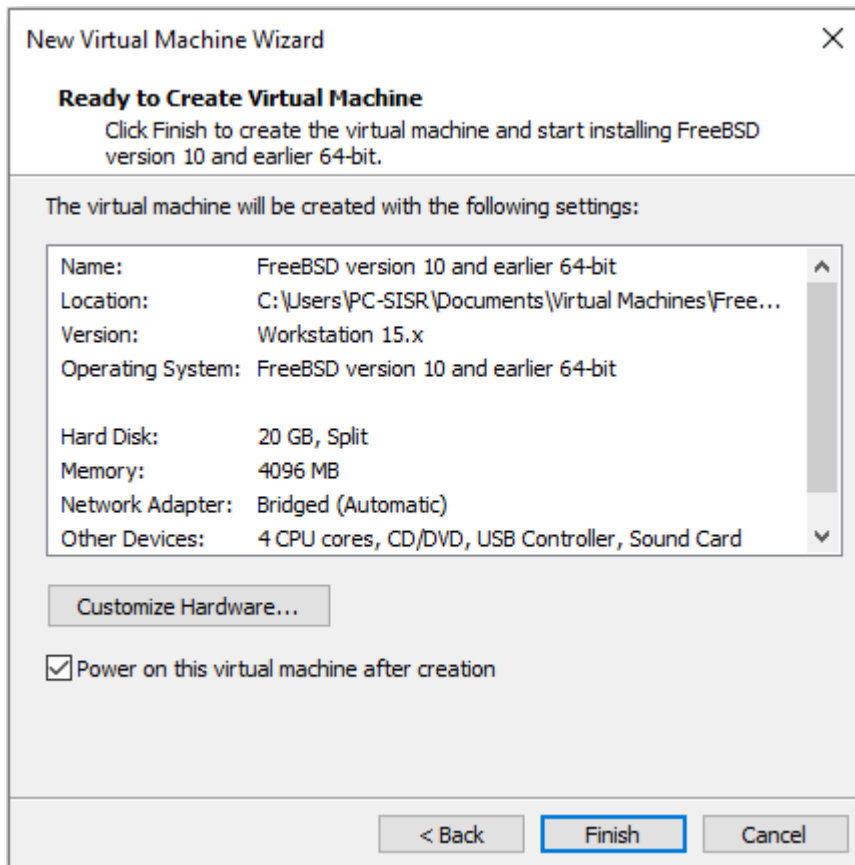
Store virtual disk as a single file

Split virtual disk into multiple files  
Splitting the disk makes it easier to move the virtual machine to another computer but may reduce performance with very large disks.

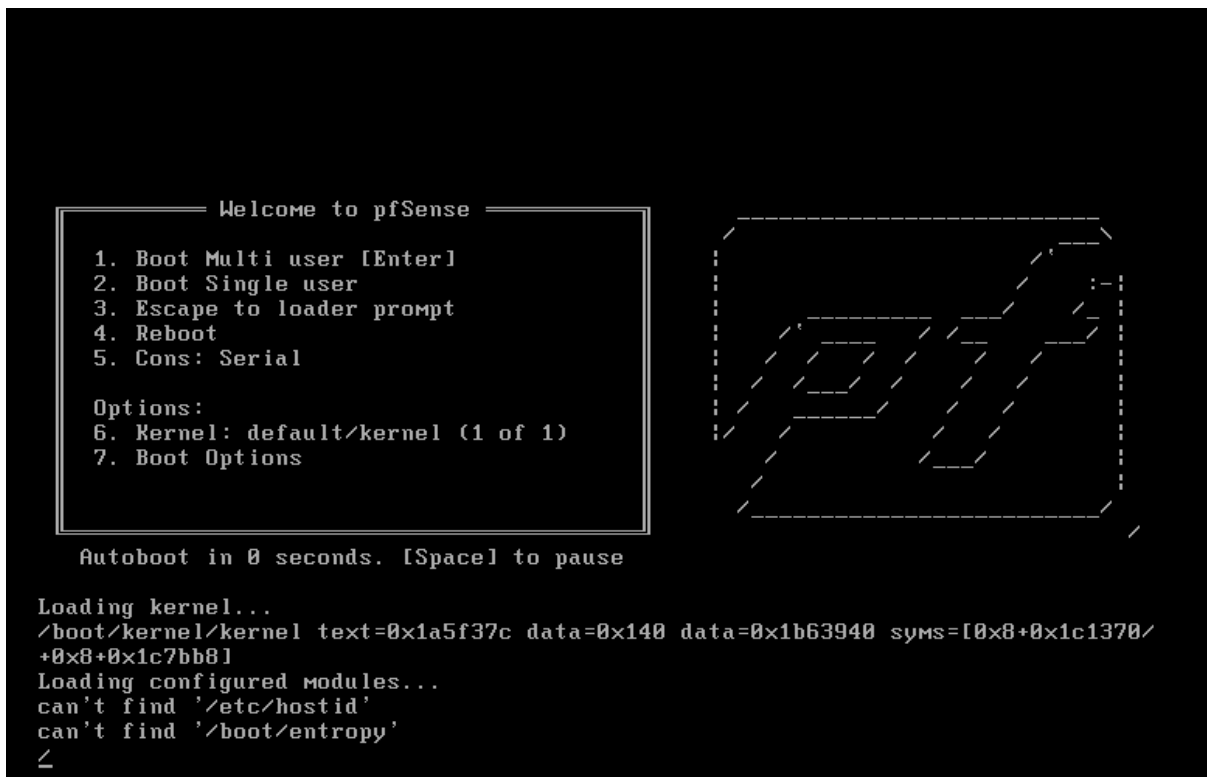
New Virtual Machine Wizard ✕

**Specify Disk File**  
Where would you like to store the disk file?

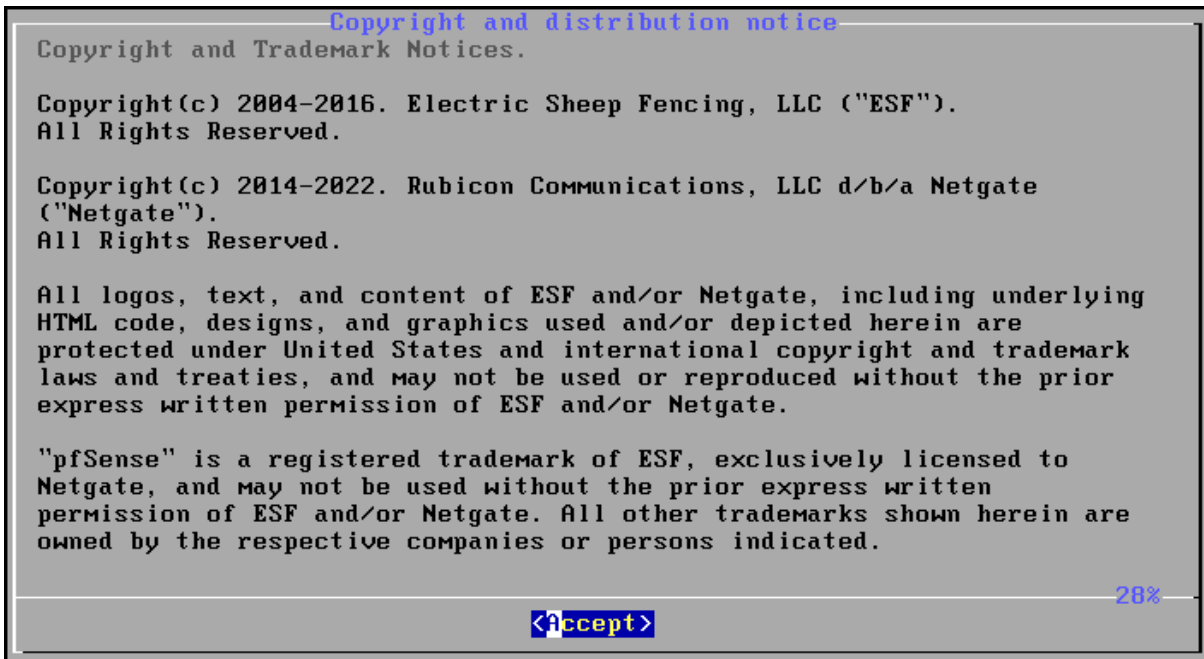
Disk file  
A 20 GB virtual disk be created using multiple disk files. The disk files will be automatically named based on this file name.



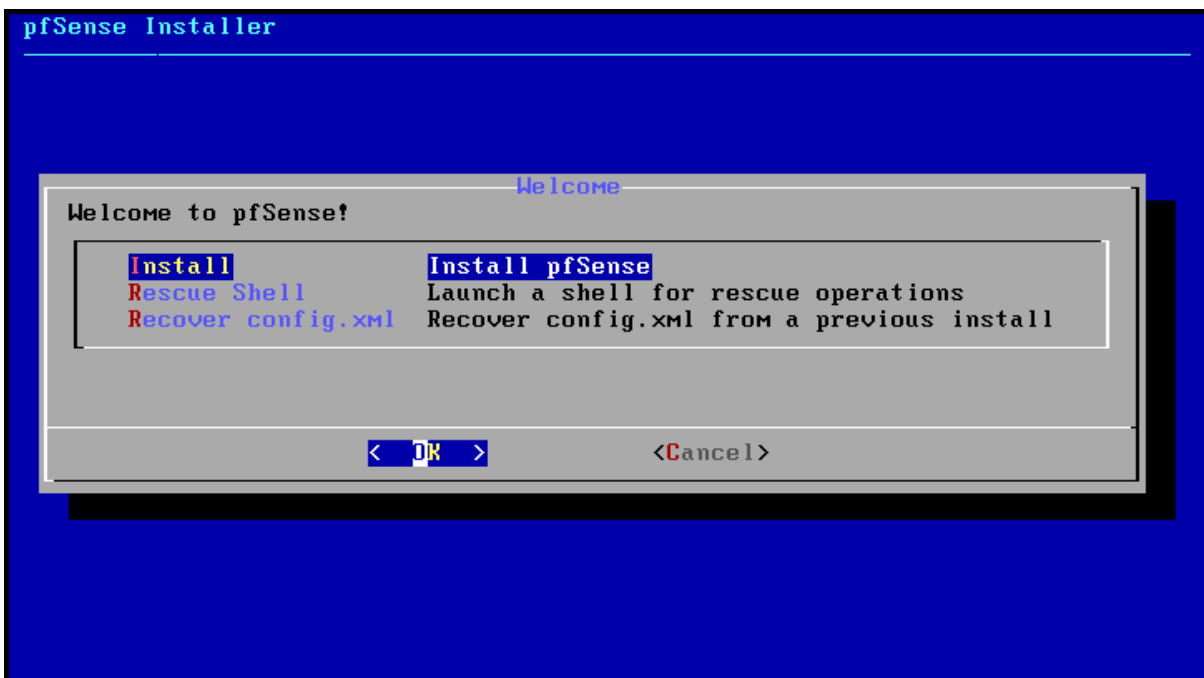
Le setup va démarrer automatiquement après quelques secondes .



Appuyez sur la touche Entrée pour Accepter.



Vérifiez que vous êtes bien sur « Install » (doit être sélectionné en bleu foncé comme dans l'image ci-dessous, sinon déplacez vous avec les flèches de votre clavier) et appuyez sur Entrée pour faire OK.



Il faut sélectionner le clavier



pfSense Installer

Keymap Selection

The system console driver for pfSense defaults to standard "US" keyboard map. Other keymaps can be chosen below.

>>> Continue with default keymap

- >- Test default keymap
- ( ) Armenian phonetic layout
- ( ) Belarusian
- ( ) Belgian
- ( ) Belgian (accent keys)
- ( ) Brazilian (accent keys)
- ( ) Brazilian (without accent keys)
- ( ) Bulgarian (BDS)
- ( ) Bulgarian (Phonetic)
- ( ) Canadian Bilingual
- ( ) Central European

↓(+)

13%

<Select>

<Cancel>

[Press arrows, TAB or ENTER]

pfSense Installer

Keymap Selection

The system console driver for pfSense defaults to standard "US" keyboard map. Other keymaps can be chosen below.

↑(-)

- ( ) 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)
- ( ) Greek (101 keys)

↓(+)

36%

<Select>

<Cancel>

[Press arrows, TAB or ENTER]

fr.kbd: French

pfSense Installer

Keymap Selection

The system console driver for pfSense defaults to standard "US" keyboard map. Other keymaps can be chosen below.

- >>> 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
- ↑(↑)

13%

<Select> <Cancel>  
[Press arrows, TAB or ENTER]

pfSense Installer

Partitioning

How would you like to partition your disk?

- |                 |  |
|-----------------|--|
| Auto (ZFS)      | Guided Root-on-ZFS                       |
| 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       |

< OK > <Cancel>

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

**<Select>**      <Cancel>

Create ZFS boot pool with displayed options

ZFS Configuration

Select Virtual Device type:

<b>stripe</b>	<b>Stripe - No Redundancy</b>
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

**< DK >**      <Cancel>

[Press arrows, TAB or ENTER]

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

pfSense Installer

ZFS Configuration

[\*] **ada0** VMware Virtual SATA Hard Drive

< **OK** >

< **Back** >

pfSense Installer

Fetching Distribution

MANIFEST	[	Done	]
base.txz	[	83%	]

Fetching distribution files...

Overall Progress

83%

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** >

pfSense Installer

---

**Complete**

Installation of pfSense  
complete! Would you like  
to reboot into the  
installed system now?

< **Reboot** >

< Shell >

```
on isa0
ZFS NOTICE: Prefetch is disabled by default if less than 4GB of RAM is present;
              to enable, add "vfs.zfs.prefetch_disable=0" to /boot/loader.conf.
ZFS filesystem version: 5
ZFS storage pool version: features support (5000)
Timecounters tick every 10.000 msec
Trying to mount root from zfs:pfSense/ROOT/default [1...
Root mount waiting for: CAM usb0 usb1
ugen1.1: <(0x15ad) EHCI root HUB> at usb1
uhub0: <(0x15ad) EHCI root HUB, class 9/0, rev 2.00/1.00, addr 1> on usb1
ugen0.1: <(0x15ad) UHCI root HUB> at usb0
uhub1: <(0x15ad) UHCI root HUB, class 9/0, rev 1.00/1.00, addr 1> on usb0
uhub1: 2 ports with 2 removable, self powered
Root mount waiting for: CAM usb0 usb1
ugen0.2: <VMware VMware Virtual USB Mouse> at usb0
uhid0 on uhub1
uhid0: <VMware> on usb0
uhid1 on uhub1
uhid1: <VMware> on usb0
Root mount waiting for: CAM usb0 usb1
ugen0.3: <VMware, Inc. VMware Virtual USB Hub> at usb0
uhub2 on uhub1
uhub2: <VMware, Inc.> on usb0
uhub0: 6 ports with 6 removable, self powered
█
```

```
WAN -> em0
LAN -> em1
```

Do you want to proceed [y!n]? y

Writing configuration...done.

One moment while the settings are reloading... done!

VMware Virtual Machine - Netgate Device ID: f8deee8da432a406e774

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

```
WAN (wan)          -> em0          -> v4/DHCP4: 172.16.14.90/24
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: █

VMware Virtual Machine - Netgate Device ID: f8deee8da432a406e774

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

WAN (wan)            -> em0               -> v4/DHCP4: 172.16.14.90/24  
LAN (lan)            -> em1               -> v4: 192.168.1.1/24

- |                                   |                                  |
|-----------------------------------|----------------------------------|
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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: █

VMware Virtual Machine - Netgate Device ID: f8deee8da432a406e774

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

WAN (wan)            -> em0               -> v4/DHCP4: 172.16.14.90/24  
LAN (lan)            -> em1               -> v4: 192.168.1.1/24

- |                                   |                                  |
|-----------------------------------|----------------------------------|
| 0) Logout (SSH only)              | 9) pfTop                         |
| 1) Assign Interfaces              | 10) Filter Logs                  |
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| 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█

```
WAN (wan)      -> em0      -> v4/DHCP4: 172.16.14.90/24
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

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

> 192.168.100.254

- |                              |                                  |
|------------------------------|----------------------------------|
| 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

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

> 192.168.100.254

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



```
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:
> 192.168.100.254
```

```
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:
>
```

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

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

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

```
Enter the new LAN IPv4 address. Press <ENTER> for none:
> 192.168.100.254
```

```
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:
>
```

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

```
Do you want to enable the DHCP server on LAN? (y/n) n
Disabling IPv4 DHCPD...
Disabling IPv6 DHCPD...
```

```
Do you want to revert to HTTP as the webConfigurator protocol? (y/n) n 
```

The IPv4 LAN address has been set to 192.168.100.254/24  
You can now access the webConfigurator by opening the following URL in your web browser:

`https://192.168.100.254/`

Press <ENTER> to continue.

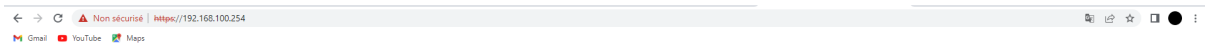
VMware Virtual Machine - Netgate Device ID: f8deee8da432a406e774

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

WAN (wan) -> em0 -> v4/DHCP4: 172.16.14.90/24  
LAN (lan) -> em1 -> v4: 192.168.100.254/24

- |                                   |                                  |
|-----------------------------------|----------------------------------|
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| 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: █



[Login to pfSense](#)

SIGN IN

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

### Status / Dashboard

#### System Information

Name	pfSense.home.arpa
User	admin@192.168.100.102 (Local Database)
System	VMware Virtual Machine Netgate Device ID: f8d8ee8da432a406e774
BIOS	Vendor: Phoenix Technologies LTD Version: 6.00 Release Date: Thu Feb 27 2020
Version	2.6.0-RELEASE (amd64) built on Mon Jan 31 19:57:53 UTC 2022 FreeBSD 12.3-STABLE  The system is on the latest version. Version information updated at Thu Mar 9 9:08:27 UTC 2023
CPU Type	Intel(R) Core(TM) i7-9700 CPU @ 3.00GHz AES-NI CPU Crypto: Yes (inactive) QAT Crypto: No
Hardware crypto	
Kernel PTI	Disabled
MDS Mitigation	Inactive
Uptime	00 Hour 45 Minutes 04 Seconds
Current date/time	Thu Mar 9 9:31:07 UTC 2023
DNS server(s)	• 127.0.0.1 • 172.16.14.254
Last config change	Thu Mar 9 8:57:32 UTC 2023
State table size	0% (27/198000) Show states

#### Netgate Services And Support

Contract type  
Community Support  
Community Support Only

#### NETGATE AND pfSense COMMUNITY SUPPORT RESOURCES

If you purchased your pfSense gateway firewall appliance from Netgate and elected **Community Support** at the point of sale or installed pfSense on your own hardware, you have access to various community support resources. This includes the **NETGATE RESOURCE LIBRARY**.

You also may upgrade to a Netgate Global Technical Assistance Center (TAC) Support subscription. We're always on! Our team is staffed 24x7x365 and committed to delivering enterprise-class, worldwide support at a price point that is more than competitive when compared to others in our space.

- Upgrade Your Support
- Netgate Global Support FAQ
- Netgate Professional Services
- Community Support Resources
- Official pfSense Training by Netgate
- Visit Netgate.com

If you decide to purchase a Netgate Global TAC Support subscription, you **MUST** have your **Netgate Device ID (NDI)** from your firewall in order to validate support for this unit. Write down your NDI and store it in a safe place. You can purchase TAC support [here](#).

#### Interfaces

WAN	↑	1000baseT <full-duplex>	172.16.14.90
LAN	↑	1000baseT <full-duplex>	192.168.100.254