

# Instalacja routera pfSense na Proxmox od PUQ.

**pfSense** to dystrybucja firewall/router oparta na FreeBSD.

**pfSense** jest przeznaczony do zainstalowania na komputerze, jest znany ze swojej niezawodności i oferuje funkcje, które często można znaleźć tylko w drogich komercyjnych zaporach. Ustawień można dokonać za pomocą interfejsu internetowego, który umożliwia korzystanie z niego bez znajomości podstawowych danych. Urządzenia sieciowe z pfSense są powszechnie używane jako zapory obwodowe, routery, serwery DHCP / DNS, sieci VPN.

Pobierz i wgraj obraz ISO najnowszej wersji pfSense ze strony <https://www.pfsense.org/download/>

Utwórz maszynę wirtualną z następnymi parametrami:

CPU: 4

RAM: 2Gb

CD/DVD: pfSense.iso

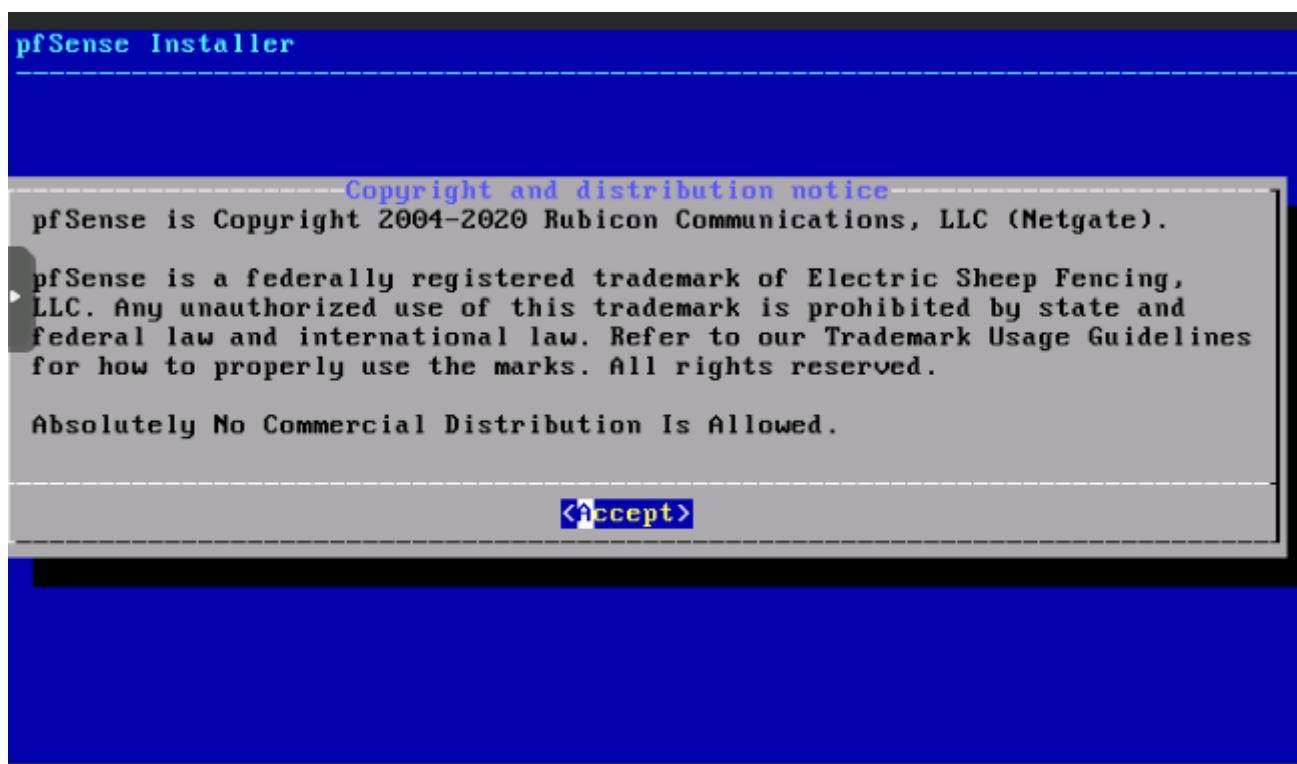
HDD: 32 GB (virtio)

LAN1: vmbr0 (virtio)

LAN2: vmbr1 (virtio)

▀ Pamięć	2.00 GiB
▀ Procesory	4 (1 sockets, 4 cores)
▀ BIOS	Domyślnie (SeaBIOS)
▀ Ekran	Domyślnie
⚙ Machine	Domyślnie (i440fx)
▀ SCSI Controller	VirtIO SCSI
💿 napęd CD/DVD (ide2)	storage:iso/pfSense-CE-2.4.5-RELEASE-p1-amd64.iso,media=cdrom,size=734870K
Ổ Dysk (virtio0)	storage:100/vm-100-disk-0.qcow2,size=32G
⇒ Urządzenie sieciowe (net0)	virtio=96:DA:5C:85:4B:2A,bridge=vmbr0,firewall=1
⇒ Urządzenie sieciowe (net1)	virtio=12:EA:B3:89:20:B7,bridge=vmbr1,firewall=1

Uruchom maszynę i zainstaluj system.



## pfSense Installer

Welcome to pfSense!

**Install**

Rescue Shell

Recover config.xml

**Install pfSense**

Launch a shell for rescue operations

Recover config.xml from a previous install

< **OK** >

<**Cancel**>

## 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

L( +)

13%

**<Select>**

<**Cancel**>

[Press arrows, TAB or ENTER]

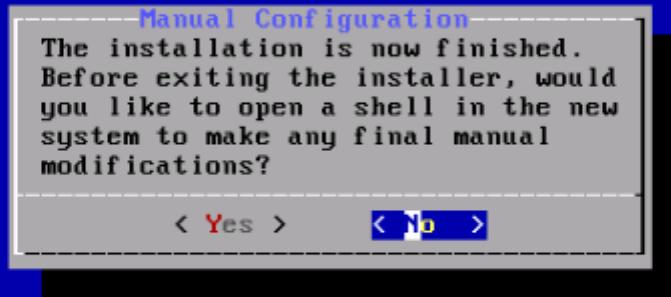
## pfSense Installer



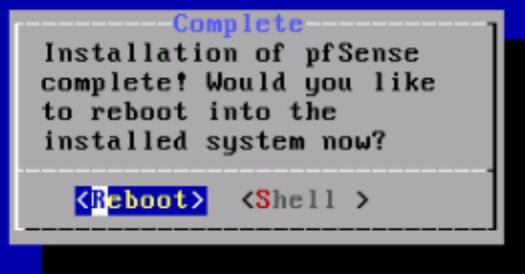
## pfSense Installer



## pfSense Installer



## pfSense Installer



Po zainstalowaniu usuń napęd z konfiguracji maszyny wirtualnej, i uruchom maszynę.

Konfigurowanie pfSense przy pierwszym butowaniu.

Nie używamy VLANów.

```
AMD Features=0x20100000<SYSCALL,NX,LM>
AMD Features2=0x1<LAHF>
Hypervisor: Origin = "KUMKUMKUM"
Done.
..... done.
Initializing..... done.
Starting device manager (devd)...done.
Loading configuration.....done.
Updating configuration.....done.
Warning: Configuration references interfaces that do not exist: em0 em1

Network interface mismatch -- Running interface assignment option.
vtnet0: link state changed to UP
vtnet1: link state changed to UP

Valid interfaces are:

vtnet0 96:da:5c:85:4b:2a (down) VirtIO Networking Adapter
vtnet1 12:ea:b3:89:20:b7 (down) VirtIO Networking Adapter

Do VLANs need to be set up first?
If VLANs will not be used, or only for optional interfaces, it is typical to
say no here and use the webConfigurator to configure VLANs later, if required.

Should VLANs be set up now [y/n]? n
```

Wprowadzamy interfejs WAN (sieć publiczna)

```
Loading configuration.....done.
Updating configuration.....done.
Warning: Configuration references interfaces that do not exist: em0 em1

Network interface mismatch -- Running interface assignment option.
vtnet0: link state changed to UP
vtnet1: link state changed to UP

Valid interfaces are:
vtnet0 96:da:5c:85:4b:2a (down) VirtIO Networking Adapter
vtnet1 12:ea:b3:89:20:b7 (down) VirtIO Networking Adapter

Do VLANs need to be set up first?
If VLANs will not be used, or only for optional interfaces, it is typical to
say no here and use the webConfigurator to configure VLANs later, if required.

Should VLANs be set up now [y/n]? n

If the names of the interfaces are not known, auto-detection can
be used instead. To use auto-detection, please disconnect all
interfaces before pressing 'a' to begin the process.

Enter the WAN interface name or 'a' for auto-detection
(vtnet0 vtnet1 or a): vtnet0
```

Wprowadzamy interfejs LAN (sieć prywatna)

```
Network interface mismatch -- Running interface assignment option.  
vtnet0: link state changed to UP  
vtnet1: link state changed to UP  
  
Valid interfaces are:  
  
vtnet0 96:da:5c:85:4b:2a (down) VirtIO Networking Adapter  
vtnet1 12:ea:b3:89:20:b7 (down) VirtIO Networking Adapter  
  
Do VLANs need to be set up first?  
If VLANs will not be used, or only for optional interfaces, it is typical to  
say no here and use the webConfigurator to configure VLANs later, if required.  
  
Should VLANs be set up now [y\?n]? n  
  
If the names of the interfaces are not known, auto-detection can  
be used instead. To use auto-detection, please disconnect all  
interfaces before pressing 'a' to begin the process.  
  
Enter the WAN interface name or 'a' for auto-detection  
(vtnet0 vtnet1 or a): vtnet0  
  
Enter the LAN interface name or 'a' for auto-detection  
NOTE: this enables full Firewalling/NAT mode.  
(vtnet1 a or nothing if finished): vtnet1
```

Potwierdzam.

```
vtnet1 12:ea:b3:89:20:b7 (down) VirtIO Networking Adapter  
  
Do VLANs need to be set up first?  
If VLANs will not be used, or only for optional interfaces, it is typical to  
say no here and use the webConfigurator to configure VLANs later, if required.  
  
Should VLANs be set up now [y\?n]? n  
  
If the names of the interfaces are not known, auto-detection can  
be used instead. To use auto-detection, please disconnect all  
interfaces before pressing 'a' to begin the process.  
  
Enter the WAN interface name or 'a' for auto-detection  
(vtnet0 vtnet1 or a): vtnet0  
  
Enter the LAN interface name or 'a' for auto-detection  
NOTE: this enables full Firewalling/NAT mode.  
(vtnet1 a or nothing if finished): vtnet1  
  
The interfaces will be assigned as follows:  
  
WAN -> vtnet0  
LAN -> vtnet1  
  
Do you want to proceed [y\?n]? y
```

Konfigurowanie statycznego adresu na interfejsie WAN.

Parametry sieci publicznej dostaniesz u usługodawcy.

```
Starting syslog...done.  
Starting CRON... done.  
pfSense 2.4.5-RELEASE (Patch 1) amd64 Tue Jun 02 17:51:17 EDT 2020  
Bootup complete
```

```
FreeBSD/amd64 (pfSense.locldomain) (ttyv0)  
pfSense - Netgate Device ID: 43dea805af9247dedd34  
▶ * Welcome to pfSense 2.4.5-RELEASE-p1 (amd64) on pfSense ***  
  
WAN (wan)      -> vtne0      ->  
LAN (lan)      -> vtne1      -> 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
```

```
pfSense - Netgate Device ID: 43dea805af9247dedd34  
*** Welcome to pfSense 2.4.5-RELEASE-p1 (amd64) on pfSense ***  
  
WAN (wan)      -> vtne0      ->  
LAN (lan)      -> vtne1      -> 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  
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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: 2
```

```
Available interfaces:
```

```
1 - WAN (vtne0 - dhcp, dhcp6)  
2 - LAN (vtne1 - static)
```

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

```
*** Welcome to pfSense 2.4.5-RELEASE-p1 (amd64) on pfSense ***
```

```
WAN (wan)      -> vtnet0      ->
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
```

```
Available interfaces:
```

```
1 - WAN (vtnet0 - dhcp, dhcp6)
2 - LAN (vtnet1 - static)
```

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

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

```
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
```

```
Available interfaces:
```

```
1 - WAN (vtnet0 - dhcp, dhcp6)
2 - LAN (vtnet1 - static)
```

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

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

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

```
> 212.7.223.18
```

6) Halt system  
7) Ping host  
8) Shell

15) Restore recent configuration  
16) Restart PHP-FPM

Enter an option: 2

Available interfaces:

- WAN (vtnet0 - dhcp, dhcp6)
- - LAN (vtnet1 - static)

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

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

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

> 212.7.223.18

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 WAN IPv4 subnet bit count (1 to 31):

> 28

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: 1

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

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

> 212.7.223.18

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 WAN IPv4 subnet bit count (1 to 31):

> 28

For a WAN, enter the new WAN IPv4 upstream gateway address.

For a LAN, press <ENTER> for none:

> 212.7.223.17

```
Available interfaces:
```

```
1 - WAN (vtnet0 - dhcp, dhcp6)
2 - LAN (vtnet1 - static)
```

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

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

```
Enter the new WAN IPv4 address. Press <ENTER> for none:
> 212.7.223.18
```

```
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 WAN IPv4 subnet bit count (1 to 31):
```

```
> 28
```

```
For a WAN, enter the new WAN IPv4 upstream gateway address.
```

```
For a LAN, press <ENTER> for none:
```

```
> 212.7.223.17
```

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

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

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

```
Enter the new WAN IPv4 address. Press <ENTER> for none:
> 212.7.223.18
```

```
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 WAN IPv4 subnet bit count (1 to 31):
```

```
> 28
```

```
For a WAN, enter the new WAN IPv4 upstream gateway address.
```

```
For a LAN, press <ENTER> for none:
```

```
> 212.7.223.17
```

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

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

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

```
255.0.0.0      = 8

Enter the new WAN IPv4 subnet bit count (1 to 31):
> 28

For a WAN, enter the new WAN IPv4 upstream gateway address.
For a LAN, press <ENTER> for none:
> 212.7.223.17

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

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

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

Please wait while the changes are saved to WAN...
  Reloading filter...
  Reloading routing configuration...
  DHCPD...
  Restarting webConfigurator...

The IPv4 WAN address has been set to 212.7.223.18/28

Press <ENTER> to continue.■
```

## UWAGA:

**pfSense** blokuje dostęp do WEB interfejsu na porcie WAN.

Dla odblokowania dostępu trzeba dodać regułę w zaporę.

```
easymode pass wan tcp any any 80
```

```
Reloading routing configuration...
DHCPD...
Restarting webConfigurator...

The IPv4 WAN address has been set to 212.7.223.18/28

Press <ENTER> to continue.
pfSense - Netgate Device ID: 43dea805af9247dedd34

*** Welcome to pfSense 2.4.5-RELEASE-p1 (amd64) on pfSense ***

WAN (wan)      -> vtne0      -> v4: 212.7.223.18/28
LAN (lan)      -> vtne1      -> 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: 8
```

```
pfSense - Netgate Device ID: 43dea805af9247dedd34

*** Welcome to pfSense 2.4.5-RELEASE-p1 (amd64) on pfSense ***

WAN (wan)      -> vtne0      -> v4: 212.7.223.18/28
LAN (lan)      -> vtne1      -> 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: 8

[2.4.5-RELEASE][root@pfSense.loca.../root: eas
easy_install    easy_install-3.7 easerule
[2.4.5-RELEASE][root@pfSense.loca.../root: easerule pass wan tcp any any 80
Successfully added pass rule!
[2.4.5-RELEASE][root@pfSense.loca.../root:
```

Możesz zalogować się na router za pomocą przeglądarki internetowej.

#### Domyślne parametry logowania

**Username:** admin

**Password:** pfsense



[Login to pfSense](#)

## SIGN IN

*admin*

\*\*\*\*\*

[SIGN IN](#)

**pfSense**  
COMMUNITY EDITION

System ▾   Interfaces ▾   Firewall ▾   Services ▾   VPN ▾   Status ▾   Diagnostics ▾   Help ▾   [Logout](#)

**WARNING:** The 'admin' account password is set to the default value. [Change the password in the User Manager.](#)

**Wizard / pfSense Setup /** [?](#)

**pfSense Setup**

**Welcome to pfSense® software!**

This wizard will provide guidance through the initial configuration of pfSense.  
The wizard may be stopped at any time by clicking the logo image at the top of the screen.  
**pfSense® software is developed and maintained by Netgate®**

[Learn more](#)

[» Next](#)

Revision #1

Created 27 January 2022 15:20:18 by Dmytro Kravchenko

Updated 27 January 2022 15:24:04 by Dmytro Kravchenko