

---

## Installatie pfSense

PfSense is een router besturingssysteem maar vraagt dezelfde initiële installatiestappen als andere besturingssystemen.

Upload de pfSense iso naar de ESXi server,

creëer een virtuele machine, geef deze machine de noodzakelijke resources (8GB ram, 4 CPU cores, 20GB schijfruimte en 3 netwerkkaarten), start de installatie van de iso, kies om de configuratie te doen na het herstarten van de router, kies nu em0 voor WAN aansluiting en em1 als LAN

---

# Configuratie van pfsense

pfsense  
COMMUNITY EDITION

System ▾

Interfaces ▾

Firewall ▾

Services ▾

VPN ▾

Status ▾

Diagnostics ▾

Help ▾

System / General Setup

System

Hostname

pfsense ⓘ  
Name of the firewall host, without domain part

Domain

fujiniT.be  
Do not use '.local' as the final part of the domain (TLD). The '.local' domain is widely used by mDNS (including Avahi and Apple OS X's Bonjour/Rendezvous/Airprint/Airplay), and some Windows systems and networked devices. These will not network correctly if the router uses '.local'. Alternatives such as '.local.lan' or '.mylocal' are safe.

DNS Server Settings

DNS Servers

1.1.1.1  
Address  
Enter IP addresses to be used by the system for DNS resolution. These are also used for the DHCP service, DNS Forwarder and DNS Resolver when it has DNS Query Forwarding enabled.

none ⌵  
Gateway  
Optionally select the gateway for each DNS server. When using multiple WAN connections there should be at least one unique DNS server per gateway.

Add DNS Server

+ Add DNS Server

DNS Server Override

☐ Allow DNS server list to be overridden by DHCP/PPP on WAN  
If this option is set, pfSense will use DNS servers assigned by a DHCP/PPP server on WAN for its own purposes (including the DNS Forwarder/DNS Resolver). However, they will not be assigned to DHCP clients.

Disable DNS Forwarder

☐ Do not use the DNS Forwarder/DNS Resolver as a DNS server for the firewall  
By default localhost (127.0.0.1) will be used as the first DNS server where the DNS Forwarder or DNS Resolver is enabled and set to listen on localhost, so system can use the local DNS service to perform lookups. Checking this box omits localhost from the list of DNS servers in resolv.conf.

Localization

Timezone

Etc/GMT-1 (1 hour AHEAD of GMT) ⌵  
Select a geographic region name (Continent/Location) to determine the timezone for the firewall.  
Choose a special or "Etc" zone only in cases where the geographic zones do not properly handle the clock offset required for this firewall.

Timeservers

0.pfsense.pool.ntp.org  
Use a space to separate multiple hosts (only one required). Remember to set up at least one DNS server if a host name is entered here!

Language

English ⌵  
Choose a language for the webConfigurator

webConfigurator

Theme

pfsense ⌵  
Choose an alternative css file (if installed) to change the appearance of the webConfigurator. css files are located in /usr/local/www/css/

Top Navigation

Scrolls with page ⌵  
The fixed option is intended for large screens only.

Hostname in Menu

Default (No hostname) ⌵  
Replaces the Help menu title in the Navbar with the system hostname or FQDN.

Dashboard Columns

2 ↕

Interfaces Sort

☐ Sort Alphabetically  
If selected, lists of interfaces will be sorted by description, otherwise they are listed wan,lans,optn...

Associated Panels Show/Hide

☐ Available Widgets  
Show the Available Widgets panel on the Dashboard.

☐ Log Filter  
Show the Log Filter panel in System Logs.

☐ Manage Log  
Show the Manage Log panel in System Logs.

☐ Monitoring Settings  
Show the Settings panel in Status Monitoring.

These options allow certain panels to be automatically hidden on page load. A control is provided in the title bar to un-hide the panel.

Require State Filter

☐ Do not display state table without a filter  
By default, the entire state table is displayed when entering Diagnostics > States. This option requires a filter to be entered before the states are displayed. Useful for systems with large state tables.

Left Column Labels

☐ Active  
If selected, clicking a label in the left column will select/toggle the first item of the group.

Alias Popups

☐ Disable details in alias popups  
If selected, the details in alias popups will not be shown, just the alias description (e.g. in Firewall Rules).

Disable dragging

☐ Disable dragging of firewall/nat rules.  
Disables dragging rows to allow selecting and copying row contents and avoid accidental changes.

Login page color

Blue ⌵  
Choose a color for the login page

Login hostname

☐ Show hostname on login banner

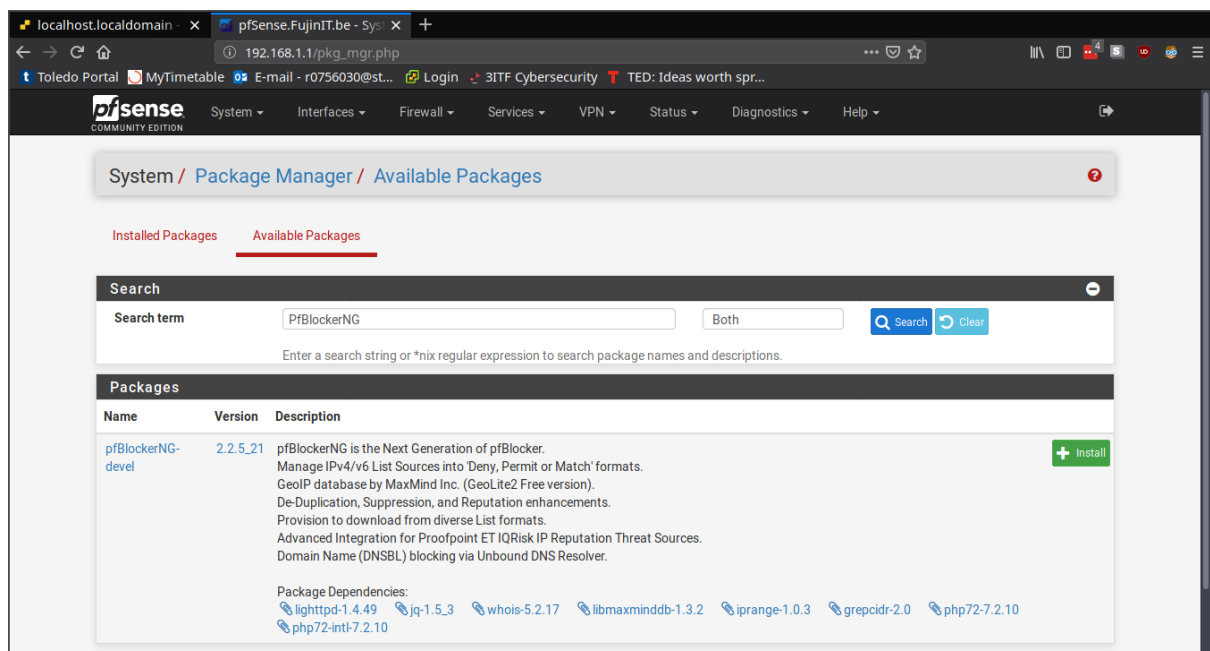
Save

pfsense is developed and maintained by Netgate. © ESF 2004 - 2019 View license.

Op deze pagina doe je de algemene setup van de pfsense router. Je geeft hier de hostname en het domein waaraan de router moet toegevoegd worden mee. Daarnaast geef je ook het IP-adres mee en de DNS-adressen, je kan hier ook de tijdzone en de taal waarin de webconfigurator moet weergegeven worden kiezen. Dit zijn zowat alle gegevens die hoeven ingevuld te worden. Dit zijn ook grotendeels dezelfde stappen die je moet doen als je pfsense voor het eerst installeert.

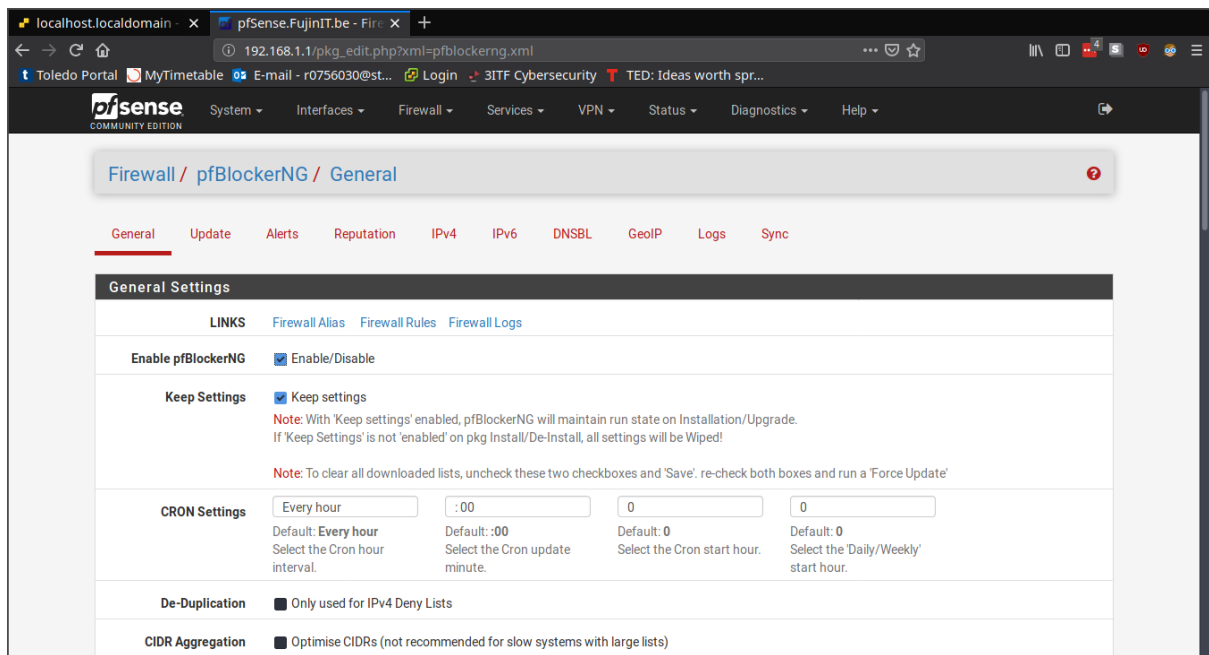
## Configuratie pfBlockerNG

Om de pfBlocker plugin te activeren in pfSense gaat u naar System > Package Manager > Available Packages

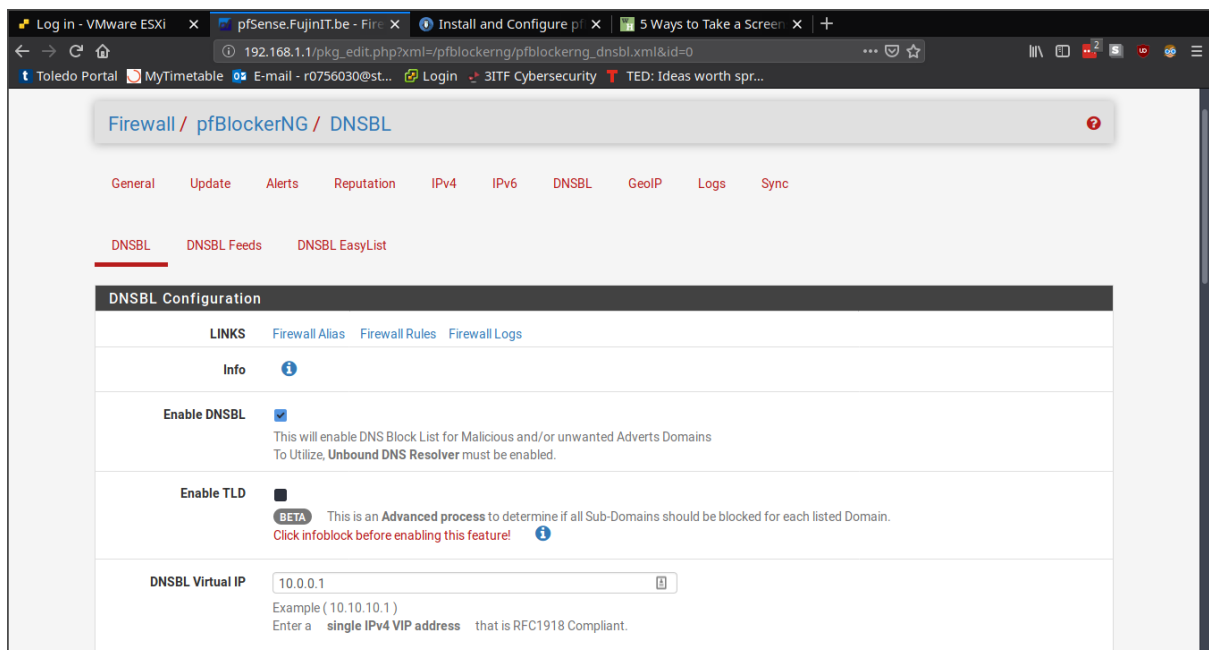


Zoek naar pfBlockerNG waarna u op de groene “Install” knop klikt bij het pfBlockerNG package

Navigeer naar Firewall > pfBlockerNG



Navigeer nu naar DNSBL en vink aan “DNSBL enable”, verander het ip bij “DNSBL Virtual IP” naar een privaat netwerk adres dat geen deel is van het eigen netwerk (bv. 10.0.0.1 als het eigen netwerk 192.0.0.0/24 is). En controleer dat DNS Listening Interface op LAN staat en List action op “Deny Both”



Navigeer nu naar “DNSBL Easylist” en zorg dat de settings overeenkomen met onderstaande screenshot

pfSense COMMUNITY EDITION

System Interfaces Firewall Services VPN Status Diagnostics Help

Firewall / pfBlockerNG / DNSBL EasyList

General Update Alerts Reputation IPv4 IPv6 DNSBL GeoIP Logs Sync

DNSBL DNSBL Feeds **DNSBL EasyList**

### DNSBL - EasyList

**LINKS** Firewall Alias Firewall Rules Firewall Logs

**DNS GROUP Name** Adblock EasyLists  
Enter DNS Group Name. Example: EasyList

**Description** EasyList Domain Blocks

**EasyList Feeds**

ON	EasyList w/o Elements	EasyList	Delete
ON	EasyPrivacy	EasyPrivacy	Delete
State	EasyList Feed	Header/Label	

Add [+ Add](#)

### DNSBL - EasyList Settings

**Categories**

- EASYLEST Adservers
- EASYLEST Adservers Popup
- EASYLEST Adult Adservers
- EASYLEST Adult Adservers Popup

Select the categories you wish to block that match the EasyList Feeds selected above.

DNSBL EasyList utilizing the following hardcoded URLs: [EasyList w/o Elements](#) | [EasyPrivacy](#)  
List distributed under the Creative Commons Attribution-ShareAlike License. ([Credits](#))

Use CTRL + CLICK to select/unselect the EasyList categories.

**List Action** Unbound  
Default: Disabled  
Select Unbound to enable 'DNSBL' blocking for this Alias.

**Update Frequency** Once a day  
Default: Never  
Select how often Feed will be downloaded. This must be within the Cron Interval/Start Hour settings.

**Weekly (Day of Week)** Monday  
Default: Monday  
Select the 'Weekly' ( Day of the Week ) to Update  
This is only required for the 'Weekly' Frequency Selection. The 24 Hour Download 'Time' will be used.

**Enable Alexa Whitelist** ☐ Filter Alias via Alexa

[Save](#)

Click to SAVE Settings and/or Rule edits. Changes are applied via CRON or 'Force Update'

pfSense is developed and maintained by Netgate. © ESF 2004 - 2019 View license.

Save de settings en navigeer naar “Update” want nu moeten de settings nog automatisch toegepast worden op de firewall.

Selecteer “Reload” en dan “All” om alle regels nu te updaten anders moet pfSense wachten tot de volgende cron run om deze toe te passen

## Configuratie Squid proxy

Om Squid te installeren navigeren we eerst naar System > Package Manager > Available Packages

Daar zoeken we in de zoekbalk naar “Squid”

Omdat we ook Squid Guard gaan installeren klikken we op “Install” zowel naast Squid Proxy als Squid Guard

Navigeer naar **Local Cache**

---

Wijzig hier:

- Hard disk cache size naar eigen keuze
- Memory cache size zoveel als pfsense kan missen
- Maximum object size aangezien dit voor een publiek netwerk is kan dit best kleiner zijn want grote bestanden (downloads) moeten niet gecached worden

Klik **save**

Navigeer naar **Services > Squid Proxy Server**

Wijzig hier:

- Proxy Interface(s) selecteer LAN
- Allow users on interface aanvinken
- Transparent Proxy aanvinken
- Enable logging wanneer logging vereist is

Klik **save**

Controleer de status van de proxy **Status > Services**.

## Configuratie SquidGuard

### Downloading blacklist:

Navigeer naar **Services > SquidGuard Proxy Filter**

vink **Blacklist** aan

blacklist URL = <http://www.shallalist.de/Downloads/shallalist.tar.gz>

Klik **save**

Navigeer naar de **Blacklist** tab

Klik op **Download**

### Setup:

Navigeer naar de **General settings** tab

Vink **Enable** aan

Zet **Blacklist options** naar **blacklist categories**

Klik **Save**

Navigeer naar **Common ACL**

klik op **Target Rules List**

Zet **Default access [all]** op **deny**

Selecteer de categorieën die u wel wilt toelaten in de lijst

Vink **Do Not Allow IP Addresses in URL** aan

---

Vink **Use safe search engine** aan

Klik op **Save**

Navigeer naar **General Settings** en klik op **Apply**

**Meer informatie:** <https://docs.netgate.com/pfsense/en/latest/cache-proxy/squidguard-package.html?highlight=squidguard>

Memory usage

15% of 8146 MiB

SWAP usage

0% of 819 MiB

Disk usage:

/

11% of 15GiB - ufs

/var/run

3% of 3.4MiB - ufs in RAM

MaxMind: Last-Modified: Wed, 30 Jan 2019 15:36:48 GMT

Deny:102688

DNSBL:42167

Alias	Count	Packets	Updated	
pfb_DNSBLIP	53	0	Feb 25 10:00	↑ (2)
pfb_Top_v4	63780	5	Feb 15 15:00	↑ (2)
pfb_Top_v6	37216	0	Feb 15 14:55	↑ (2)
DNSBL_AdblockEasyLists	21687	0	Feb 15 14:12:50	↑
DNSBL_Ad_away	20480	0	Feb 15 14:12:52	↑

Squid Antivirus Status

Squid Version

↑ 3.5.27\_3

Antivirus Scanner

↑ ClamAV 0.100.2\_1

↑ C-ICAP 0.5.3\_1,2 + SquidClamav 6.16

	Database	Date	Version	Builder
Antivirus Bases	daily.cvd	2019.02.24	25370	raynman
	bytecode.cvd	2019.01.02	328	neo
	main.cvd	2017.06.07	58	sigmgr

Last Update

Sun Feb 24 14:23:00 2019

Statistics

Unknown (no log exists)

pfSense is developed and maintained by Netgate. © ESF 2004 - 2019 View license.