Linux OS

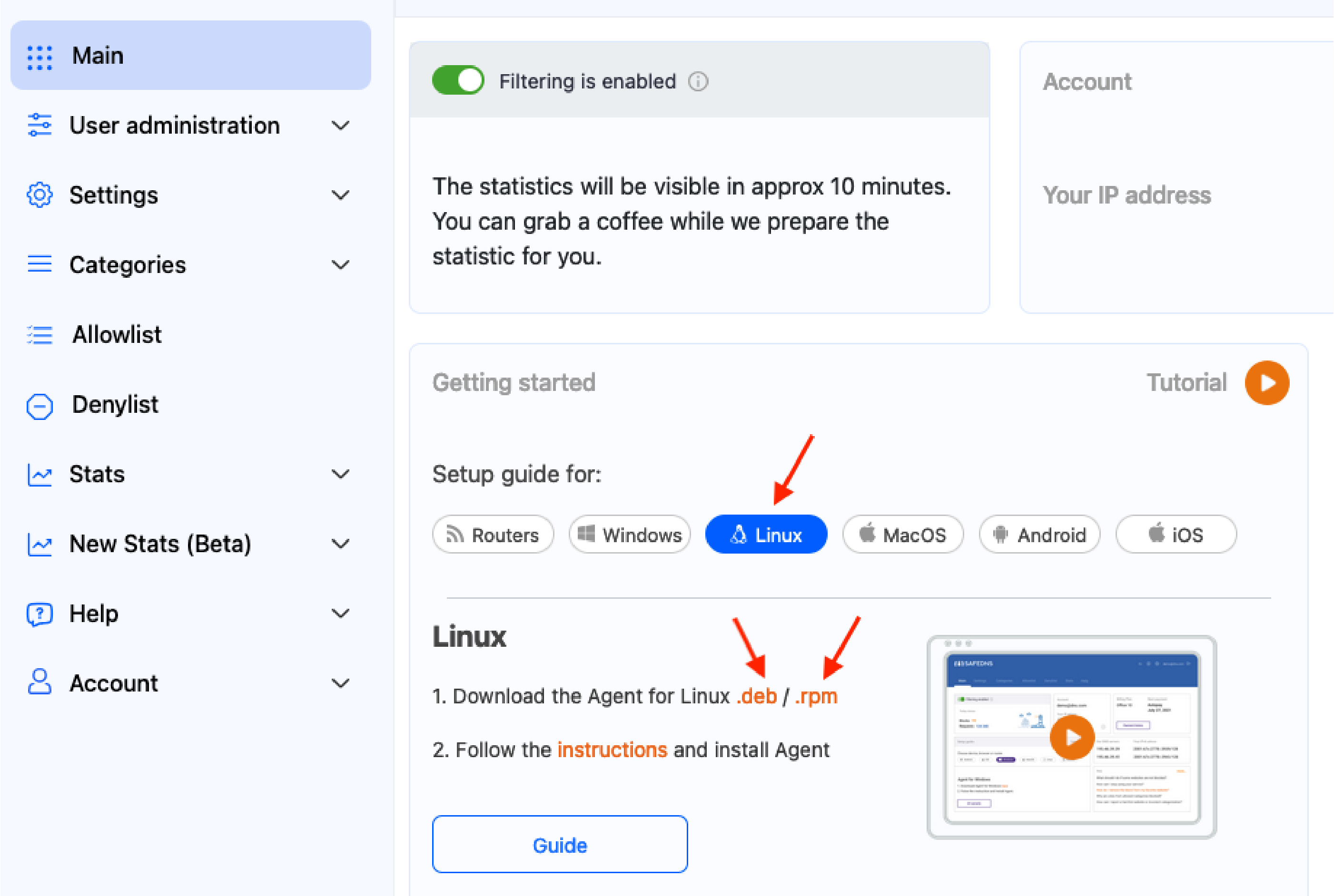
SafeDNS Agent for Linux Setup

Installation requirements: Debian 9, Ubuntu 18–22, PopOS, CentOS 7.
The Agent is available on the following billing plans: **Safe Family, Pro, Pro Plus,** and archived **Safe@Home, Safe@Office**.

Getting Started

1. Log in to your SafeDNS account with your registration email and password.

2. Navigate to the **Getting Started** tab on the main page of the **Dashboard** and select the Linux button. Choose and download the needed package: .**rpm** or .**deb**.



The statistics will be visible in approx 10 minutes. You can grab a coffee while we prepare the statistic for you.

Linux

1. Download the Agent for Linux .deb / .rpm

2. Follow the instructions and install Agent

.rpm package

Use the following command for the installation from the Terminal app:

```
sudo rpm -Uvh /home/user/Downloads/safedns-agent-1.3.1-x86_64.rpm
```

Please note, that the path to the file and/or package name might be different.

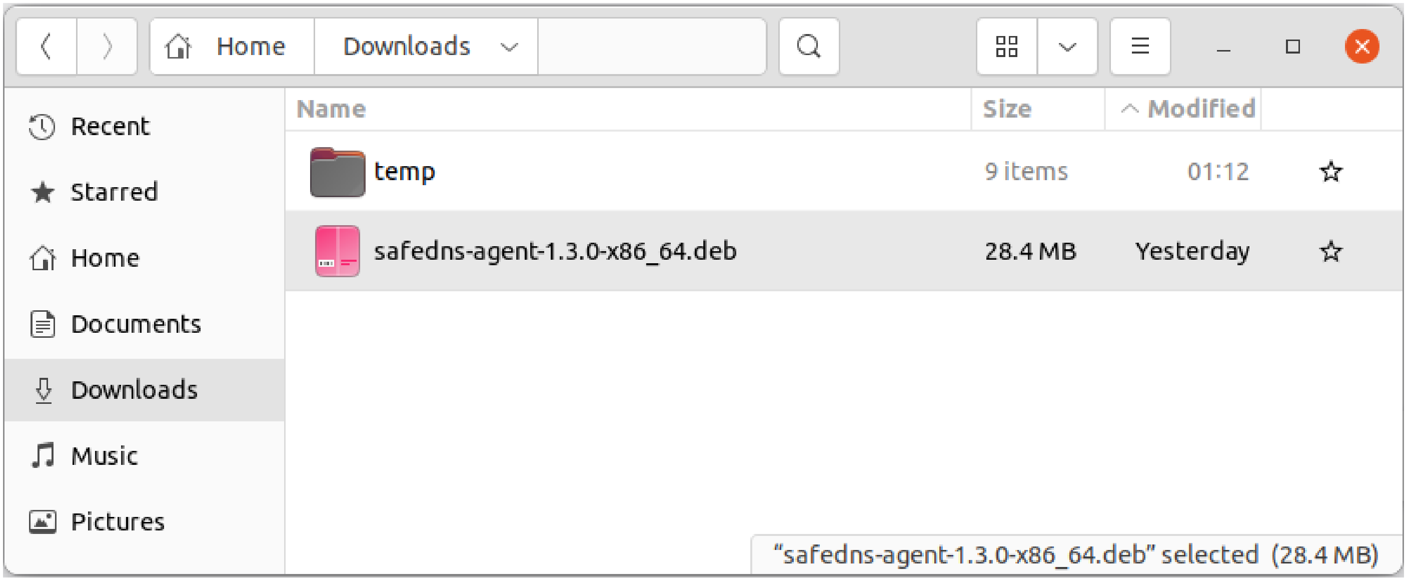
.deb package

For experienced users. You can use this command to install from the Terminal app:

```
sudo dpkg -i /home/user/Downloads/safedns-agent-1.3.1-x86_64.deb
```

Please note, that the path to the file and/or package name might be different.

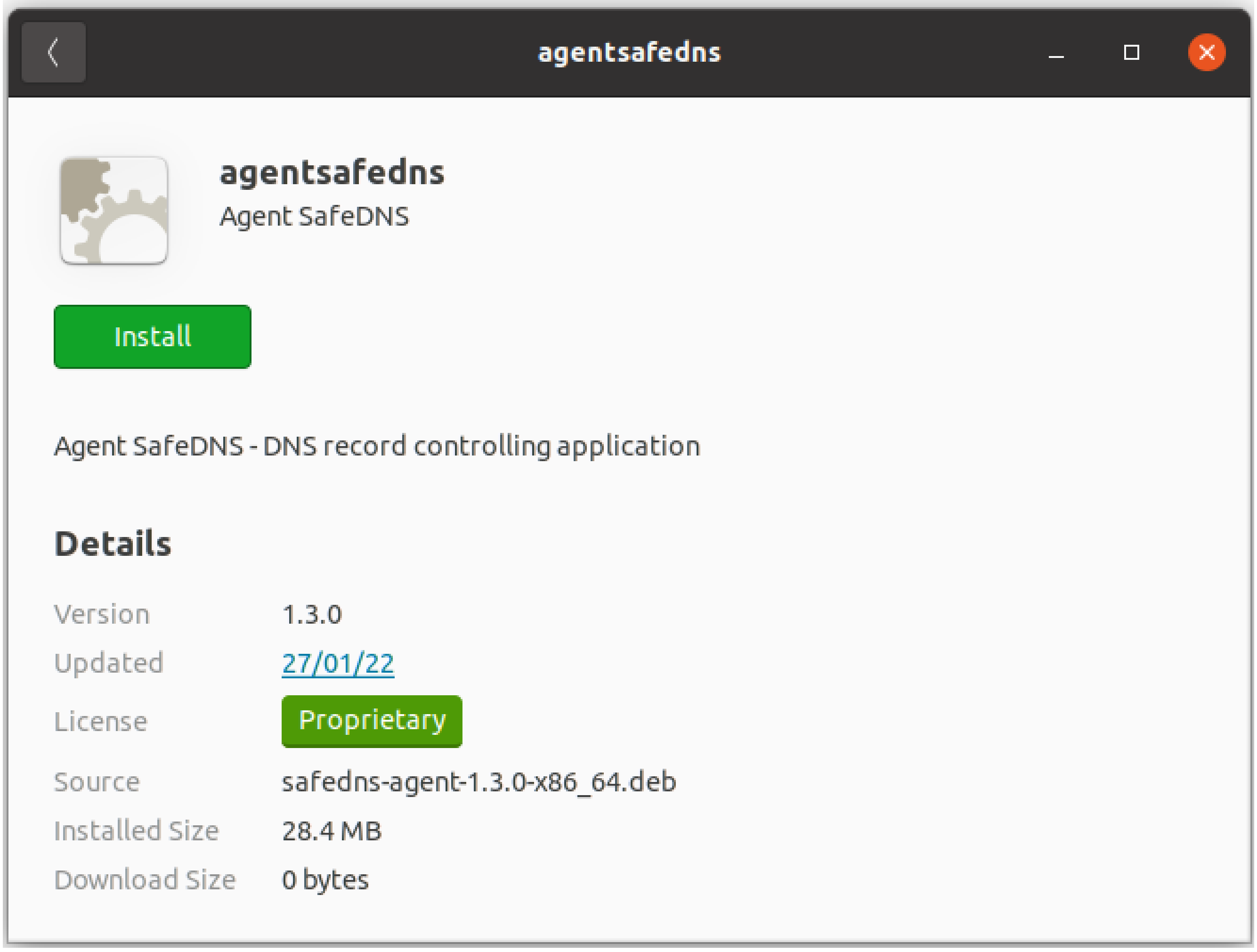
1. Open the “Downloads” folder:



Name	Size	Modified
temp	9 items	01:12
safedns-agent-1.3.0-x86_64.deb	28.4 MB	Yesterday

“safedns-agent-1.3.0-x86_64.deb” selected (28.4 MB)

2. Run the downloaded file and install the Agent. Enter the Admin password if prompted.



agentsafedns

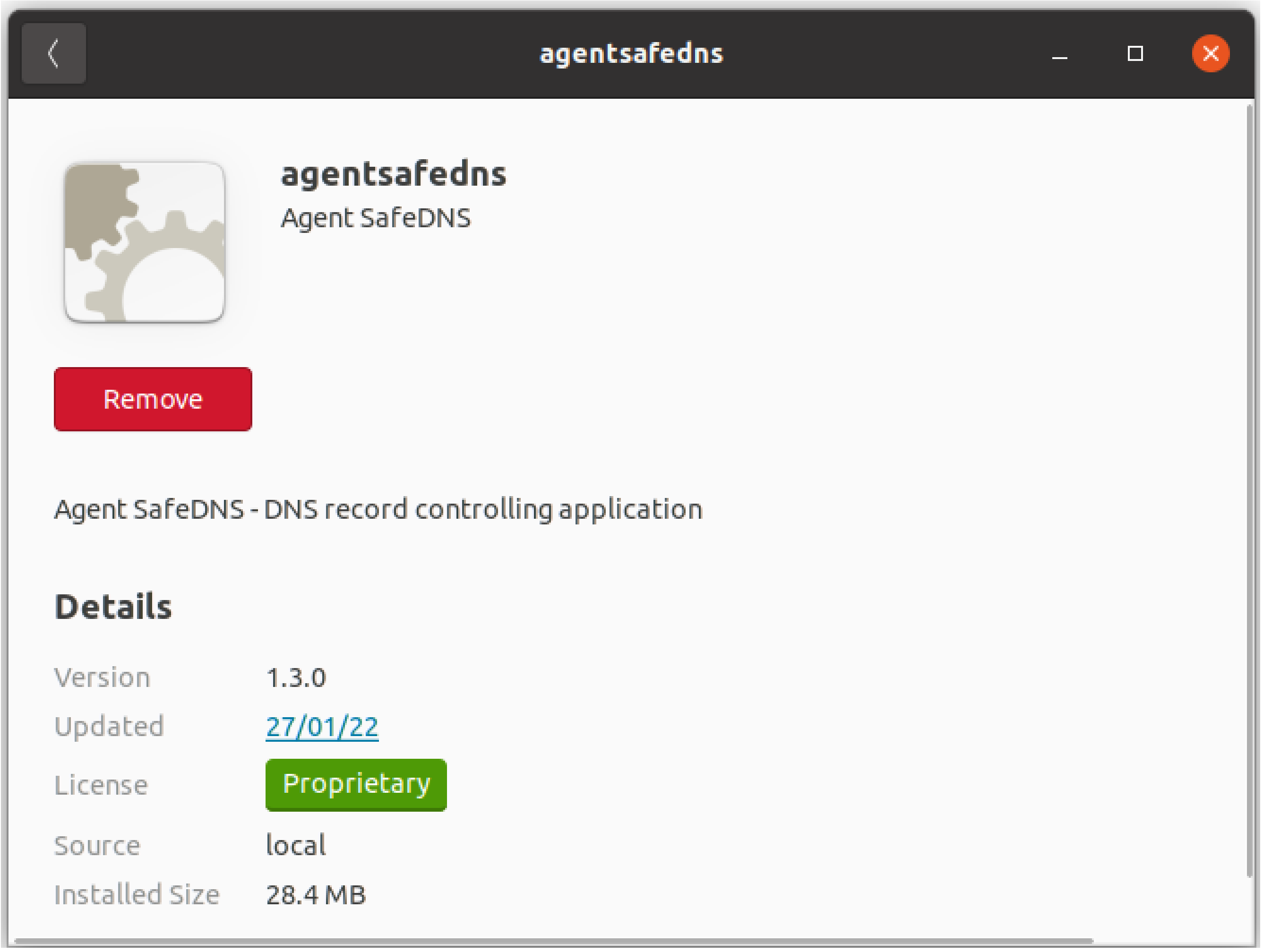
Agent SafeDNS

Agent SafeDNS - DNS record controlling application

Details

Version	1.3.0
Updated	27/01/22
License	Proprietary
Source	safedns-agent-1.3.0-x86_64.deb
Installed Size	28.4 MB
Download Size	0 bytes

3. You will see the following window once the installation finishes:



agentsafedns
Agent SafeDNS

Agent SafeDNS - DNS record controlling application

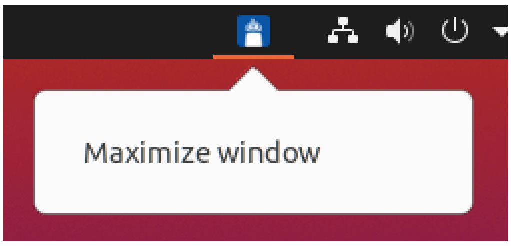
Details

Version	1.3.0
Updated	27/01/22
License	Proprietary
Source	local
Installed Size	28.4 MB

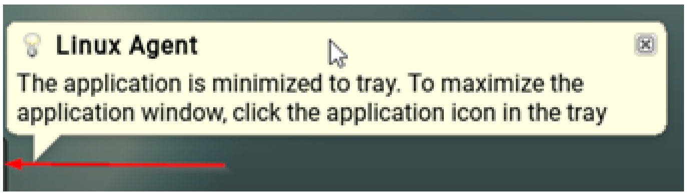
Agent Setup

1. **Restart your system.** The Agent icon will appear in the system tray.

2. Open the Agent by clicking on the icon in the system tray.

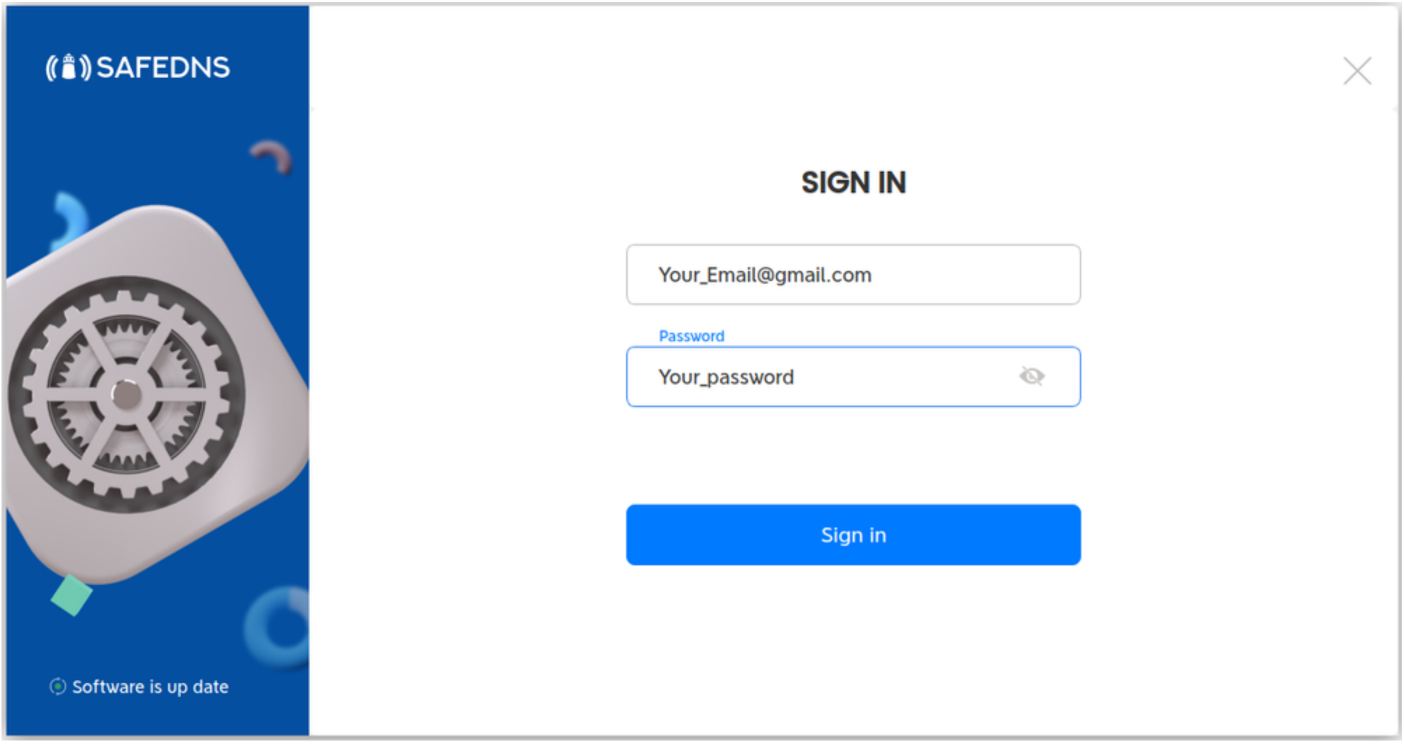


!On **Debian 9,** click on the black line in the bottom right corner, if the tray icon is hidden.



Linux Agent
The application is minimized to tray. To maximize the application window, click the application icon in the tray

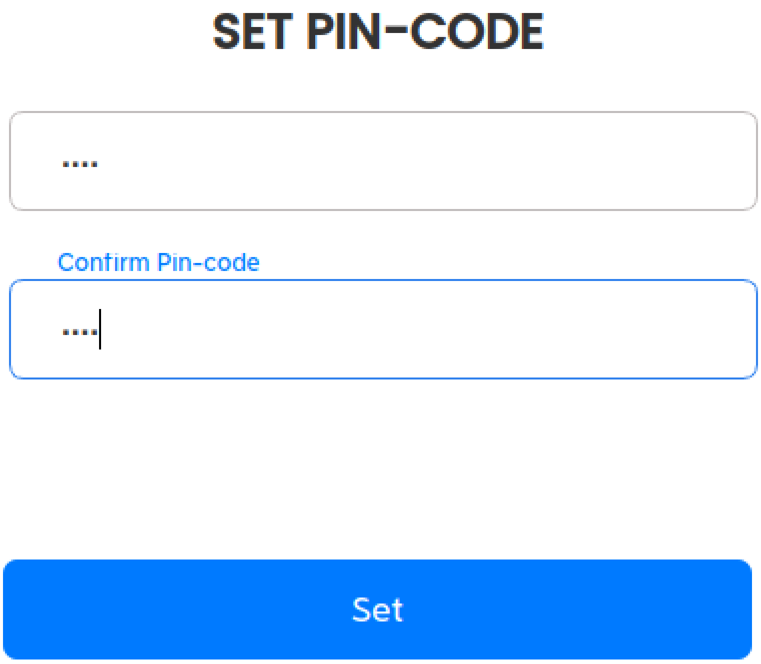
3. Enter your SafeDNS account credentials in the opened window.



Your_Email@gmail.com

Password: Your_password

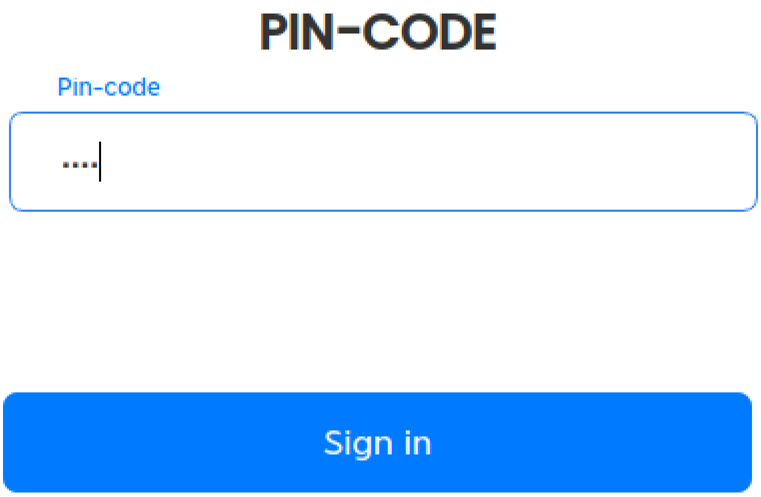
4. Set up the security PIN that will be used later to restrict access to the Agent:



····

Confirm Pin-code: ····

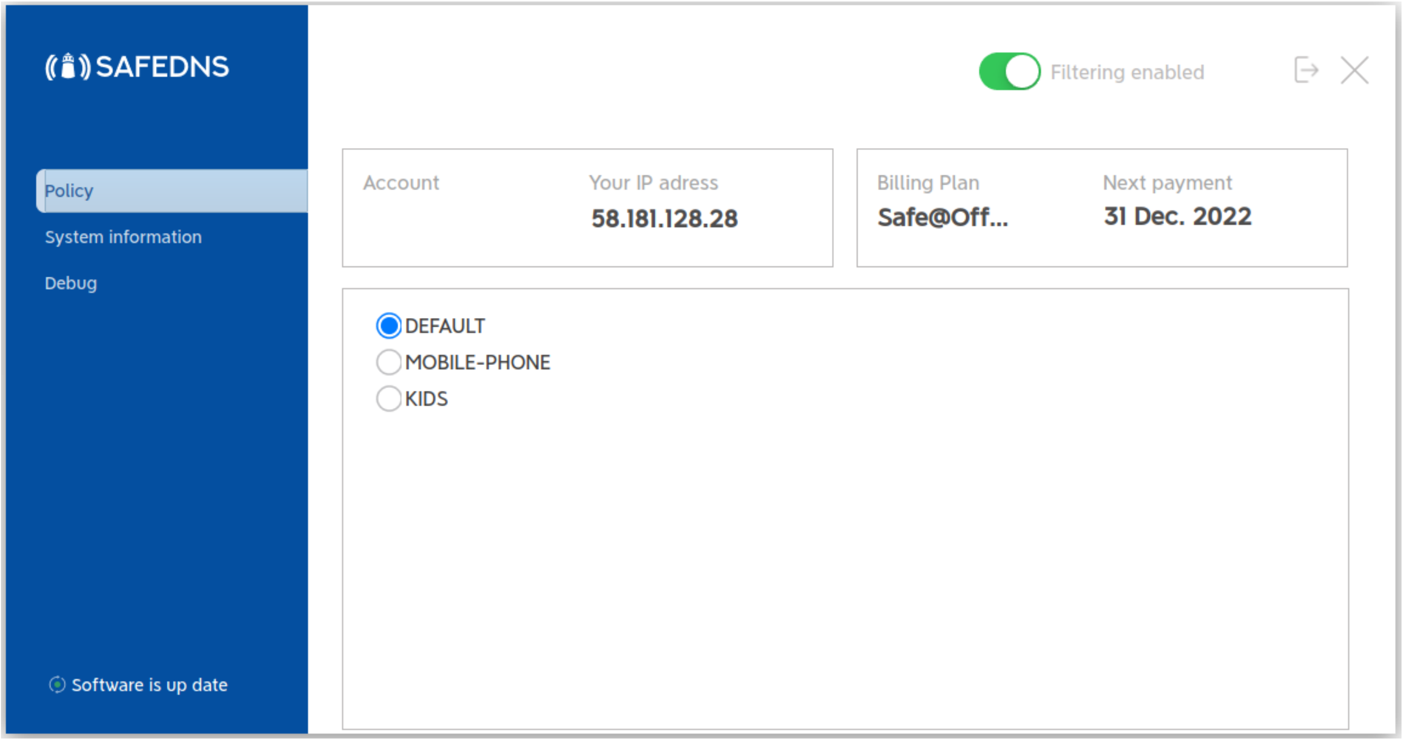
5. Enter the PIN once again to sign in to the Agent:



Agent Overview

The main window of the Agent. Here you can view your account information, current IP address, your Billing Plan, and Subscription expiration date.

Use the Policy menu to view and change the current filtering Policy.



Filtering enabled

Account

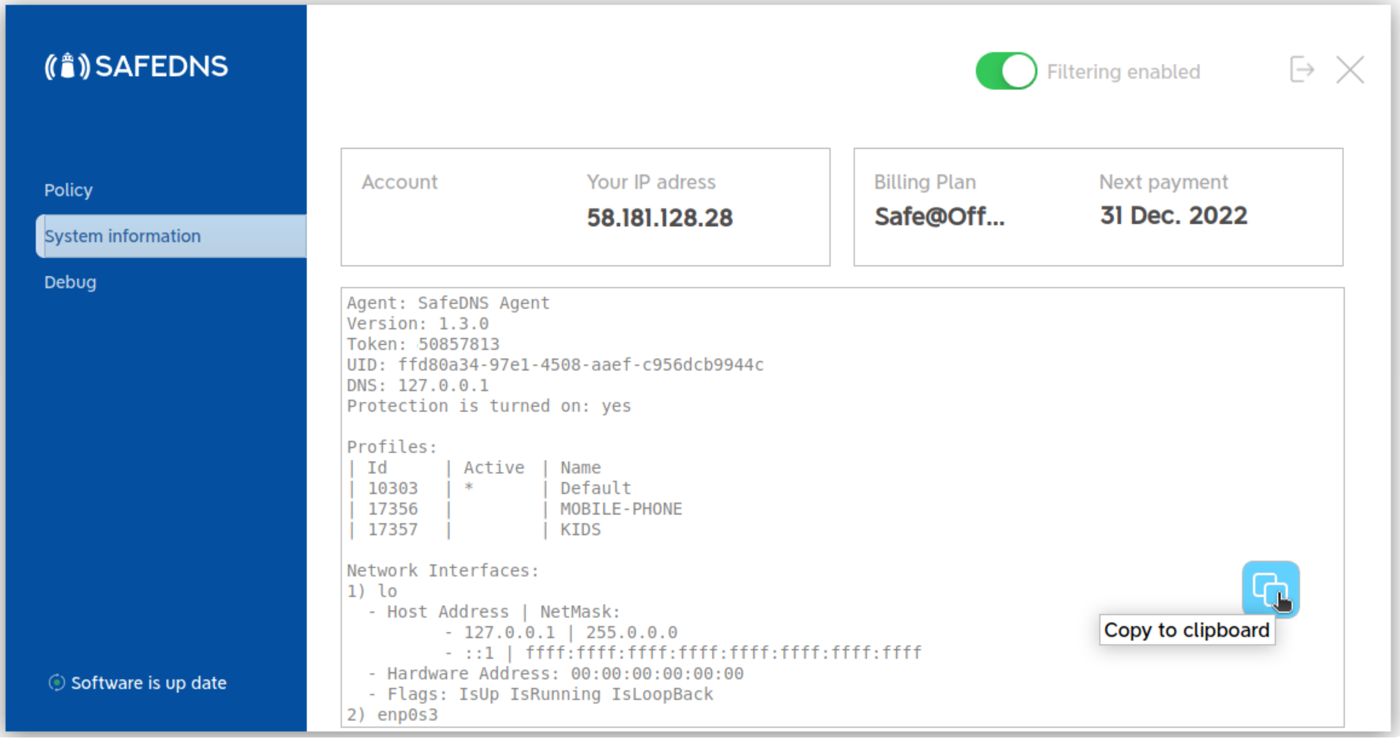
Your IP adress 58.181.128.28

Billing Plan Safe@Off...

Next payment 31 Dec. 2022

● DEFAULT
○ MOBILE-PHONE
○ KIDS

The system information menu shows brief information about the Agent, current filtering policies, and the network interfaces. The information in this menu can be copied to the clipboard by clicking the "Copy to clipboard" button.



Account

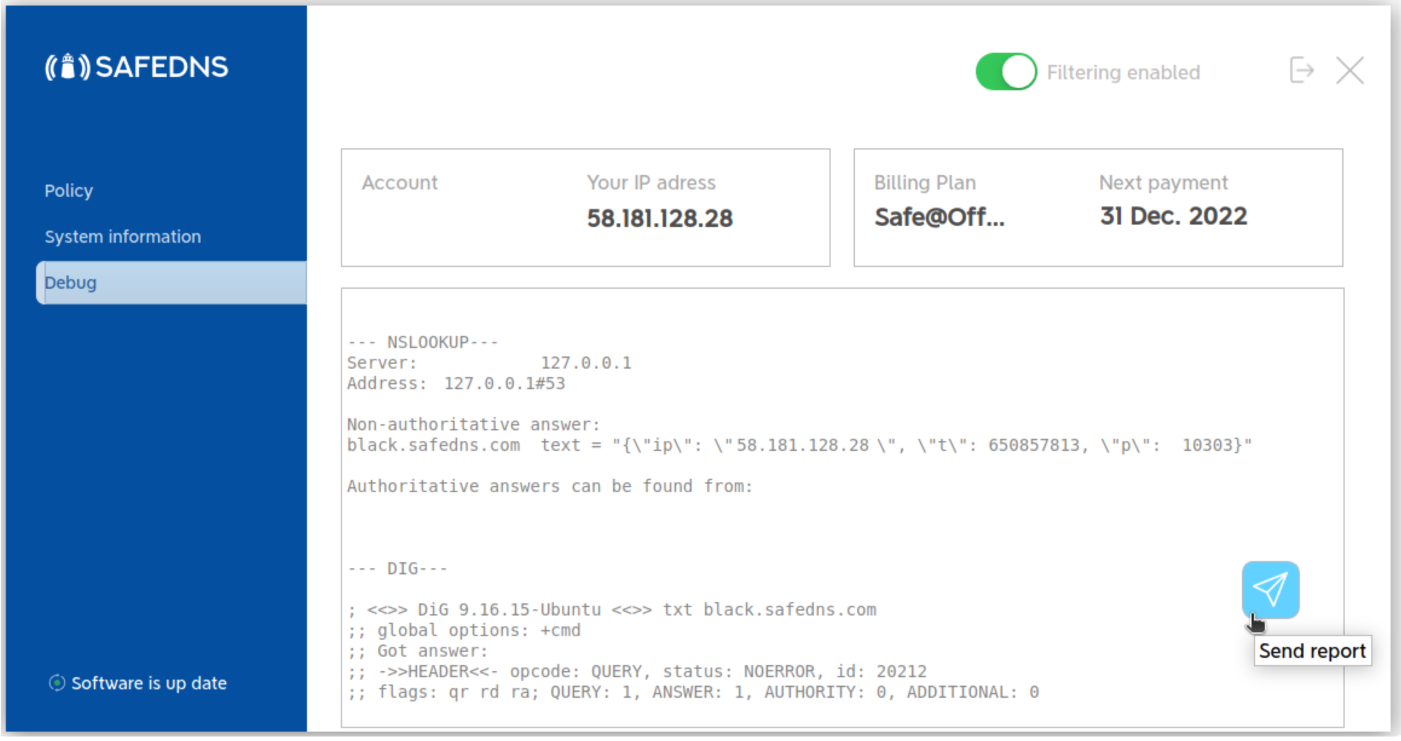
Your IP adress 58.181.128.28

Billing Plan Safe@Off...

Next payment 31 Dec. 2022

```
Agent: SafeDNS Agent
Version: 1.3.0
Token: 50857813
UID: ffd80a34-97e1-4508-aaef-c956dcb9944c
DNS: 127.0.0.1
Protection is turned on: yes

Profiles:
| Id      | Active  | Name
| 10303   | *       | Default
| 17356   |         | MOBILE-PHONE
| 17357   |         | KIDS

Network Interfaces:
1) lo
  - Host Address | NetMask:
        - 127.0.0.1 | 255.0.0.0
        - ::1 | ffff:ffff:ffff:ffff:ffff:ffff:ffff:ffff
  - Hardware Address: 00:00:00:00:00:00
  - Flags: IsUp IsRunning IsLoopBack
2) enp0s3
```

The Debug menu displays the results of the diagnostic commands that are required in case of troubleshooting. To send the debug information to SafeDNS, click the "Send report" button.



Account

Your IP adress 58.181.128.28

Billing Plan Safe@Off...

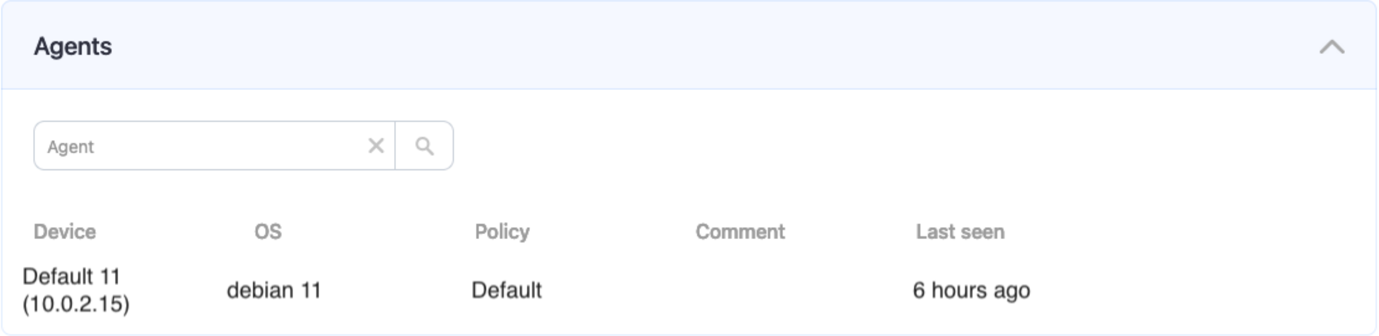
Next payment 31 Dec. 2022

```
--- NSLOOKUP---
Server:          127.0.0.1
Address:  127.0.0.1#53

Non-authoritative answer:
black.safedns.com  text = "{\"ip\": \"58.181.128.28 \", \"t\": 650857813, \"p\":  10303}"

Authoritative answers can be found from:



--- DIG---

; <<>> DiG 9.16.15-Ubuntu <<>> txt black.safedns.com
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 20212
;; flags: qr rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 0, ADDITIONAL: 0
```

Additional settings

To ensure the Agent was installed correctly, please navigate to the "**Settings**" tab in the SafeDNS Dashboard and scroll down to the bottom.

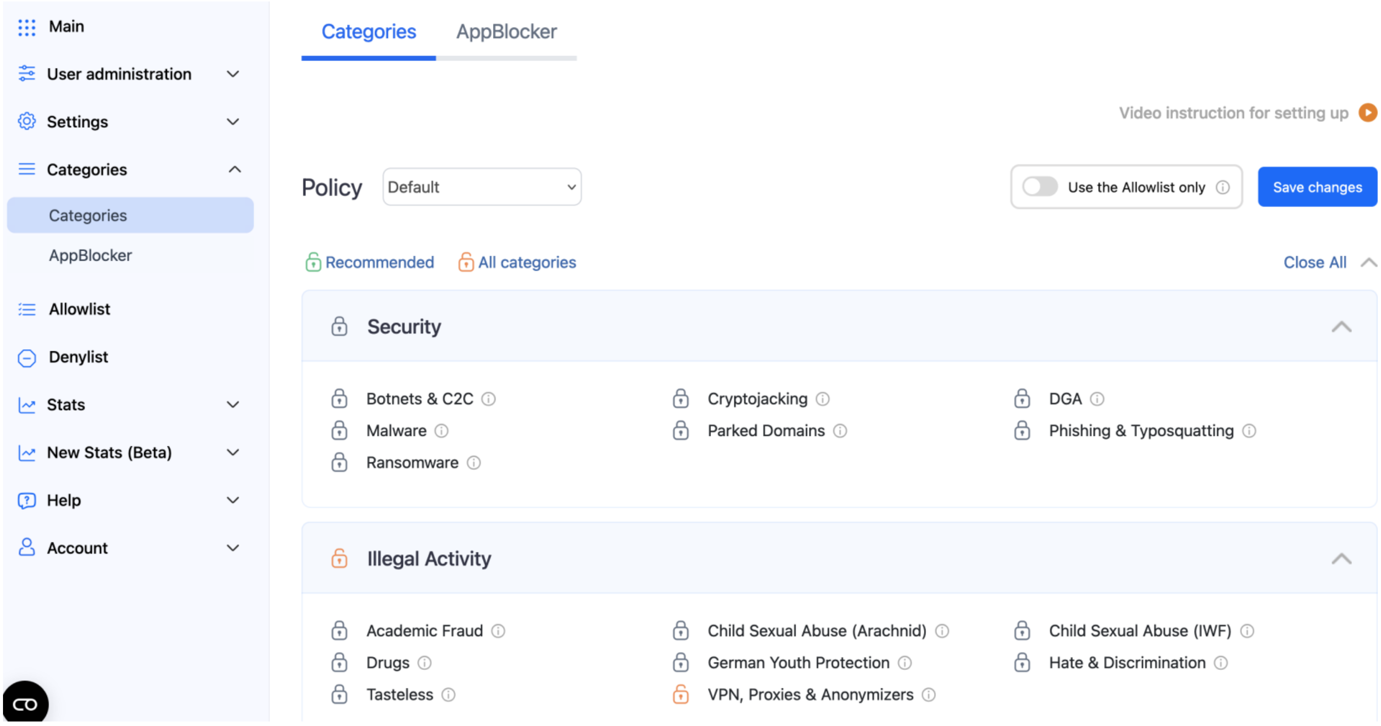
If you see the record with the Device name and your IP address, it means that the filtering is working.



Device	OS	Policy	Comment	Last seen
Default 11 (10.0.2.15)	debian 11	Default		6 hours ago

After that, you can adjust the filtering Policy according to your needs. You can select categories to block here.

Don't forget to click the "Save changes" button.



Policy: Default

○ Use the Allowlist only

Security

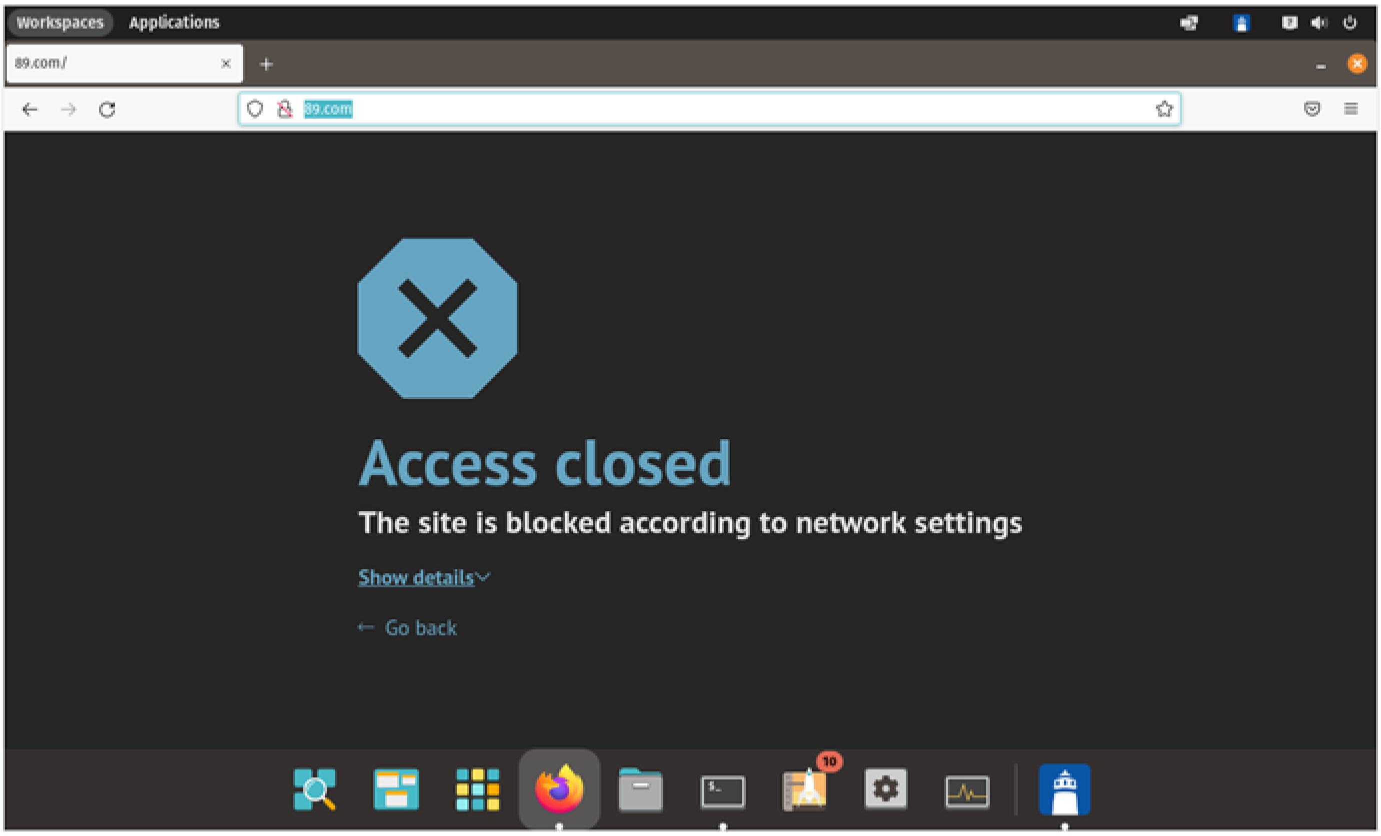
- Botnets & C2C
- Cryptojacking
- DGA
- Malware
- Parked Domains
- Phishing & Typosquatting
- Ransomware

Illegal Activity

- Academic Fraud
- Child Sexual Abuse (Arachnid)
- Child Sexual Abuse (IWF)
- Drugs
- German Youth Protection
- Hate & Discrimination
- Tasteless
- VPN, Proxies & Anonymizers

The setup is complete!

A blocked website will display an error message that the Access is closed:



Access closed

The site is blocked according to network settings

If the filtering doesn't work according to your policy settings, clear the cache of your browser.

Please note, that settings take 5-7 minutes to apply.
Stats and filtering status update every 10 minutes.

Uninstallation

For the **.rpm** package, use the following command:

```
sudo rpm -e agentsafedns
```

For the **.deb** package, use the following command:

```
sudo apt-get remove agentsafedns
```

Enter **"y"** if prompted to confirm the Agent removal.

Linux Filtering Setup via OpenVPN

> Please note, that this filtering option works via the third-party app OpenVPN.
> If you encounter any issues, please contact our Technical Support.

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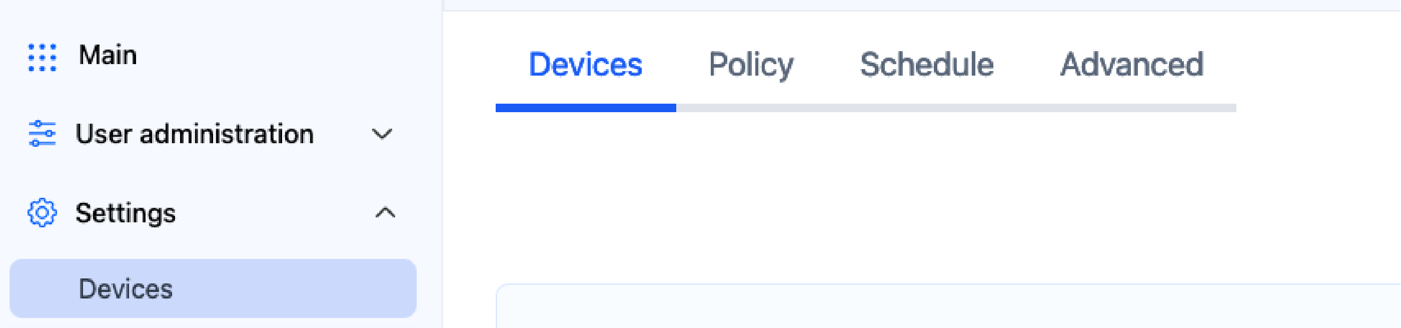
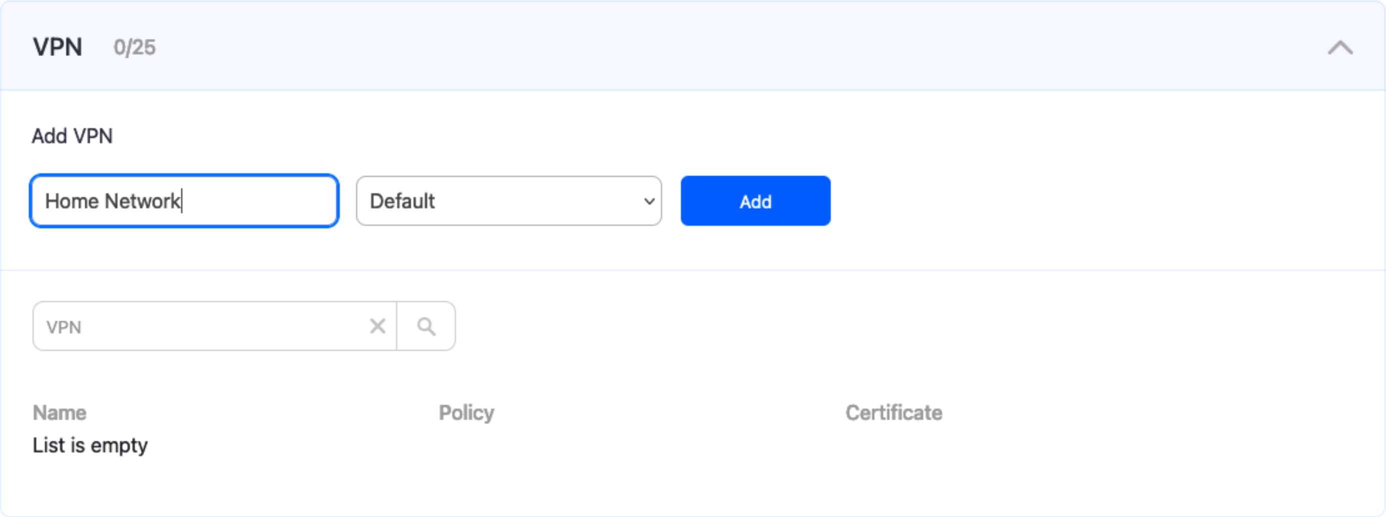
1. Open the SafeDNS Dashboard and navigate to **Settings > Devices**.



2. Scroll down to the VPN section, enter any name for a new VPN connection, and click Add.

Choose a filtering policy before adding a VPN connection, if needed.



Home Network

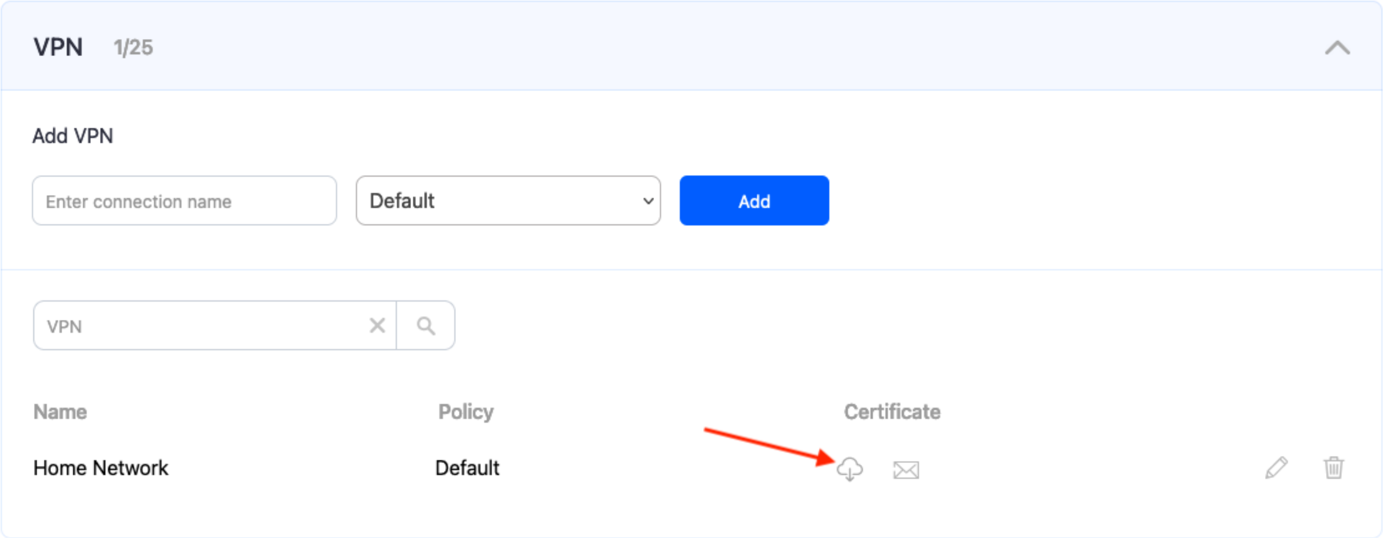
Default

List is empty

3. Upon creating the connection, two icons will appear in the "Certificate" column. One is for downloading the Certificate, and the other is for sending it by email. Press the "Cloud download" icon.

Multiple devices can use the same filtering policy, but **each device should use its own VPN certificate**.

You can also change the filtering policy of the created VPN connection by clicking on the pencil icon to the right. Please note, that you don't need to redownload your VPN certificate on your mobile device if you change its filtering policy.



Name	Policy	Certificate
Home Network	Default	

Some Linux distributions have the OpenVPN application pre-installed. In this case, skip to **Step 5**.

4. Install the OpenVPN application on your device with the following command:

```
sudo apt install openvpn
```

5. Enter the administrator account password and approve the installation if prompted.

6. Copy the downloaded Certificate to */etc/openvpn*
You can use this command with Terminal opened in folder with the certificate:

```
sudo cp safedns-123456.ovpn /etc/openvpn/
```

7. Start OpenVPN with the following command:

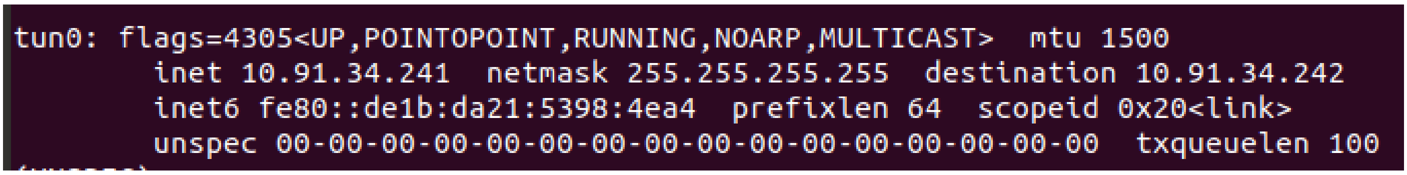
```
sudo openvpn --config /etc/openvpn/safedns-123456.ovpn
```

8. Enter the administrator account password if prompted. If the connection is established correctly, you will see the following notification:

```
Initialization Sequence Completed
```

Your Linux device is now filtered with the SafeDNS filtering policy.

You can check the OpenVPN connection with the ***ifconfig*** command. OpenVPN interface has the name ***tun***:



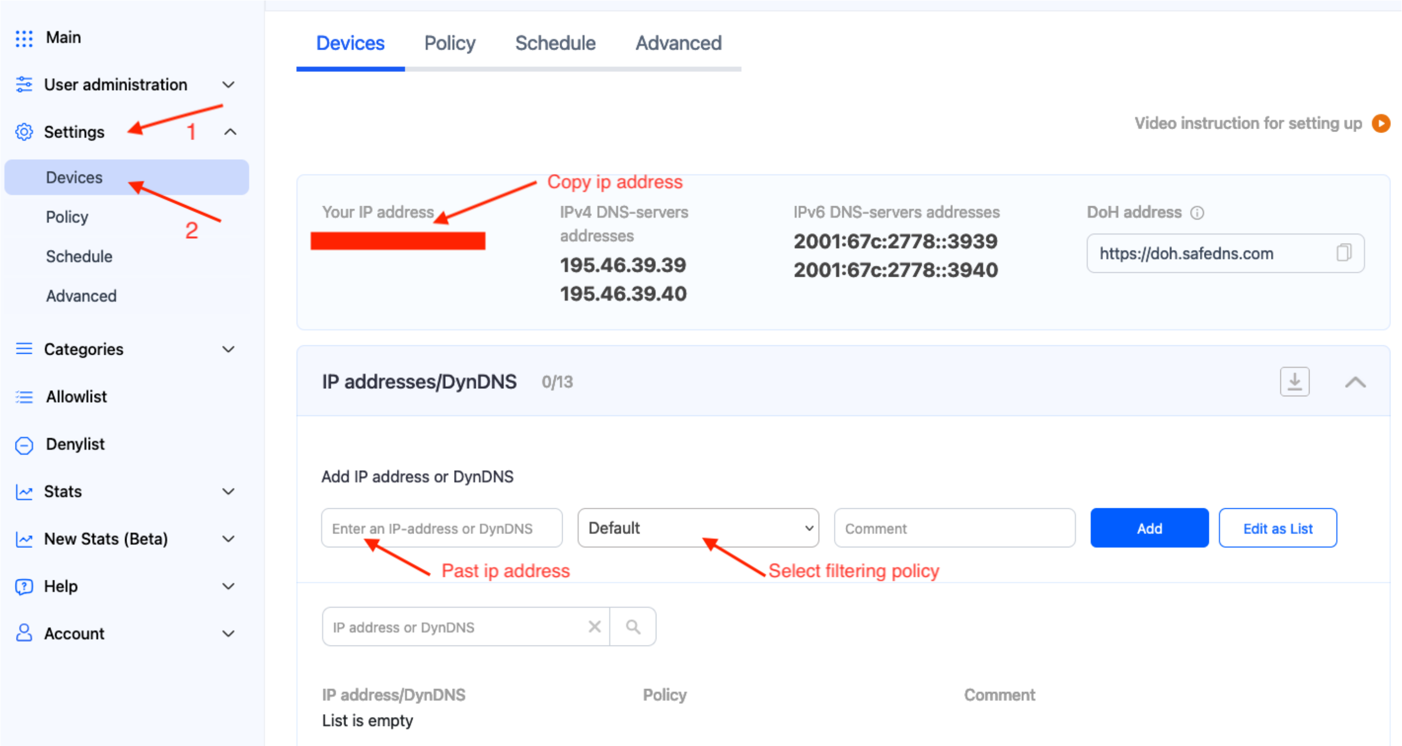
```
tun0: flags=4305<UP,POINTOPOINT,RUNNING,NOARP,MULTICAST>  mtu 1500
        inet 10.91.34.241  netmask 255.255.255.255  destination 10.91.34.242
        inet6 fe80::de1b:da21:5398:4ea4  prefixlen 64  scopeid 0x20<link>
        unspec 00-00-00-00-00-00-00-00-00-00-00-00-00-00-00-00  txqueuelen 100
```

Please note that settings take 5-7 minutes to apply.
Stats and filtering status update every 10 minutes.

Linux DNS Setup

Static IP address

1. Navigate to the SafeDNS **Dashboard > Settings** and copy your IP address in the "**Enter an IP address or DynDNS**" box. Click "**Add**".



Copy ip address

Your IP address [redacted]

IPv4 DNS-servers addresses
195.46.39.39
195.46.39.40

IPv6 DNS-servers addresses
2001:67c:2778::3939
2001:67c:2778::3940

DoH address
https://doh.safedns.com

IP addresses/DynDNS 0/13

Add IP address or DynDNS

Enter an IP-address or DynDNS | Default | Comment

Past ip address

Select filtering policy

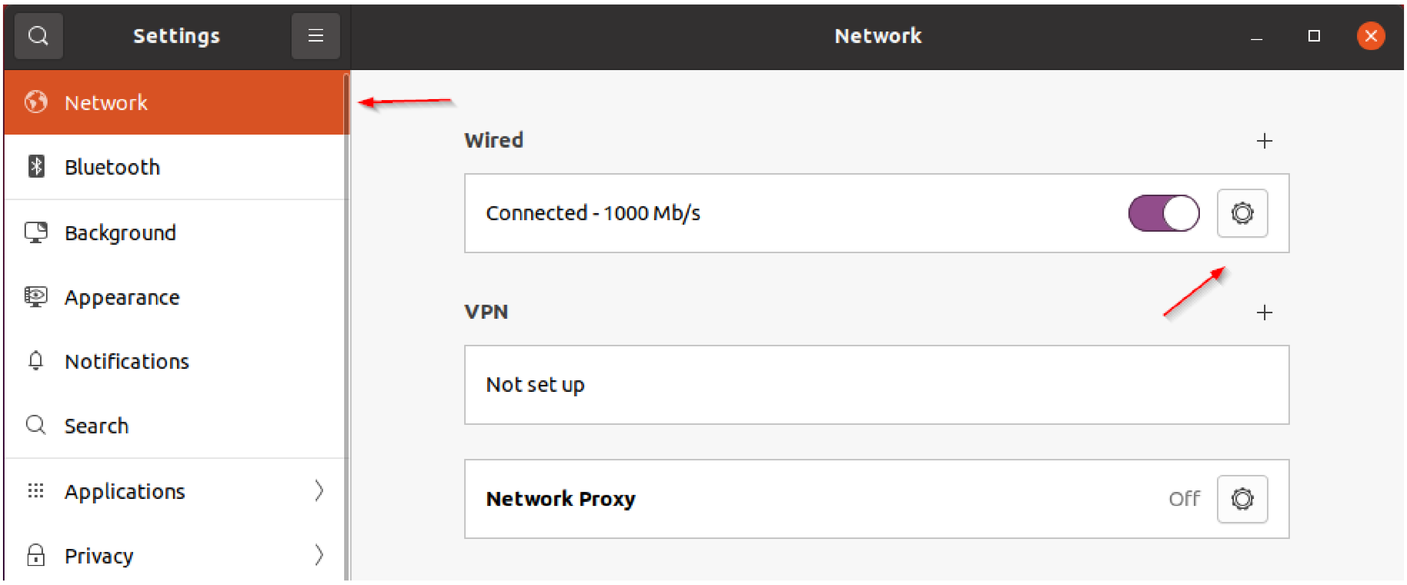
IP address or DynDNS

IP address/DynDNS	Policy	Comment
List is empty		

2. Change your system’s DNS servers to SafeDNS addresses - **195.46.39.39** and **195.46.39.40**

If you configure the network through NetworkManager, it will be sufficient to add SafeDNS servers there.

Open the settings of the current Network Interface.



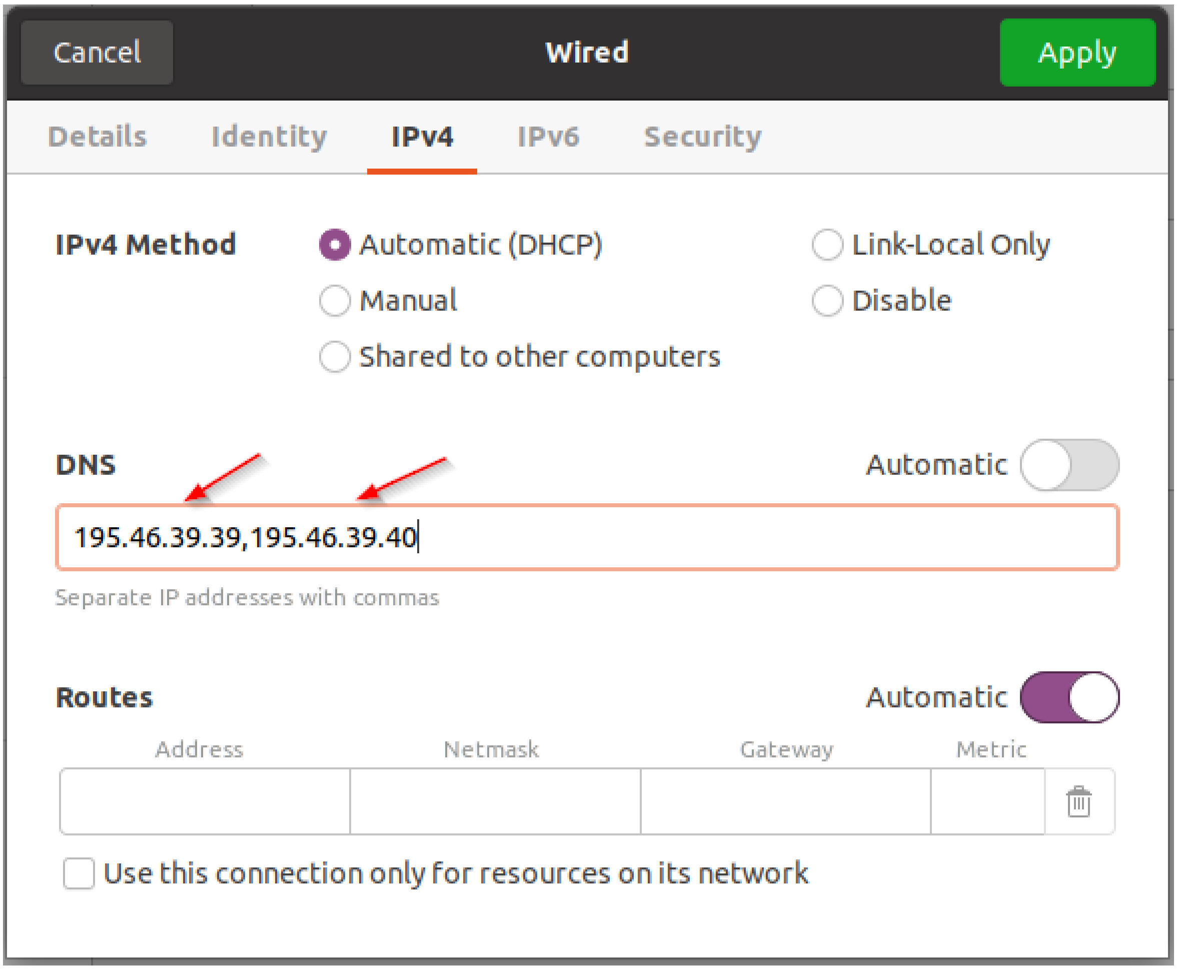
Wired: Connected - 1000 Mb/s

VPN: Not set up

Network Proxy: Off

Add SafeDNS servers: **195.46.39.39** and **195.46.39.40**.

Please note, that servers must be separated by a comma.



IPv4 Method: ● Automatic (DHCP) ○ Link-Local Only ○ Manual ○ Disable ○ Shared to other computers

DNS — Automatic: Off

195.46.39.39,195.46.39.40

Separate IP addresses with commas

Routes — Automatic: On

□ Use this connection only for resources on its network

Otherwise, you need to find out which application is used for the network settings and add SafeDNS servers there.

Your Linux device is now filtered with the SafeDNS filtering policy.

> Please note that settings take 5-7 minutes to apply.
> Stats and filtering status update every 10 minutes.

Dynamic IP address

1. Install and configure **ddclient**.

ddclient package is shipped with most Linux distributions.

If your Linux distribution doesn’t have ddclient, you can download it from GitHub.

After ddclient is installed, you need to insert the next configuration in its config file (/etc/ddclient.conf or /etc/ddclient/ddclient.conf):

```
daemon=300
syslog=yes
ssl=yes

protocol=dyndns2
server=www.safedns.com

use=web
web=http://www.safedns.com/nic/myip

# Replace with your email and password for www.safedns.com
login=you@yourmail.com
password=your_password

# Enter any name for your device.
# If you have several computers with dynamic IPs their names must differ.
laptop
```

Reboot your device and start ddclient.

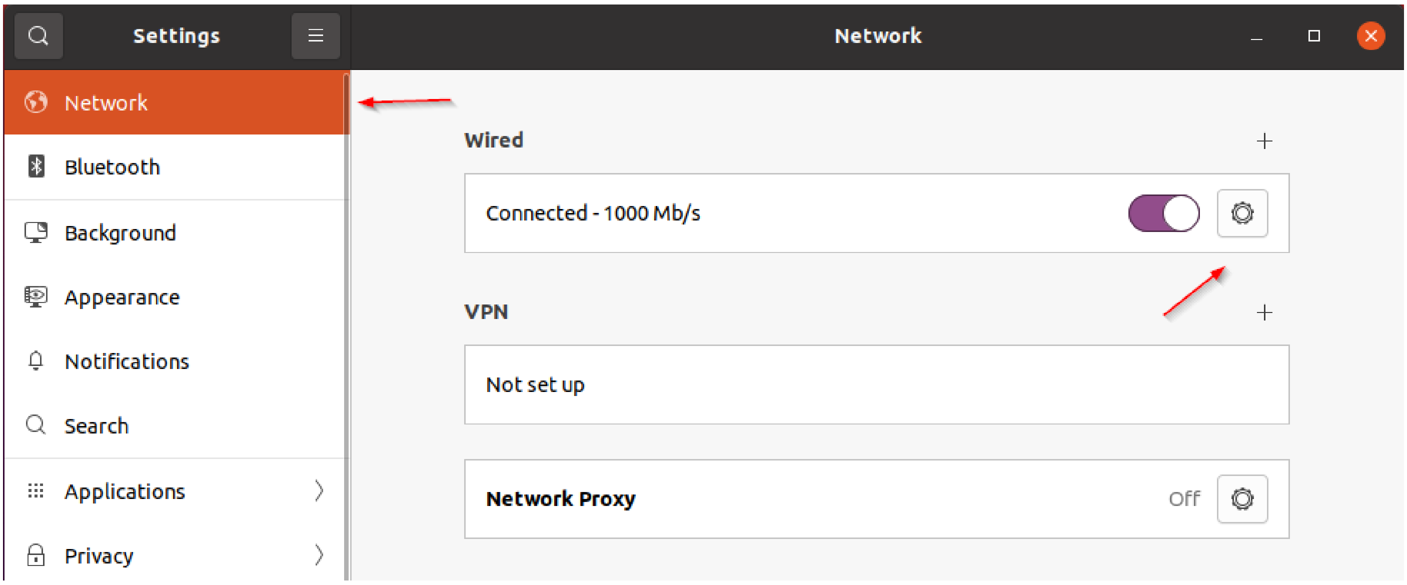
If the similar string is shown in the system logs (/var/log/syslog, /var/log/daemon.log or /var/log/messages), ddclient is successfully configured:

```
Aug 14 12:49:13 laptop ddclient[4105]: SUCCESS: updating laptop: good: IP address set to 18.26.28.10
```

2. Change your system’s DNS servers to SafeDNS addresses - **195.46.39.39** and **195.46.39.40**

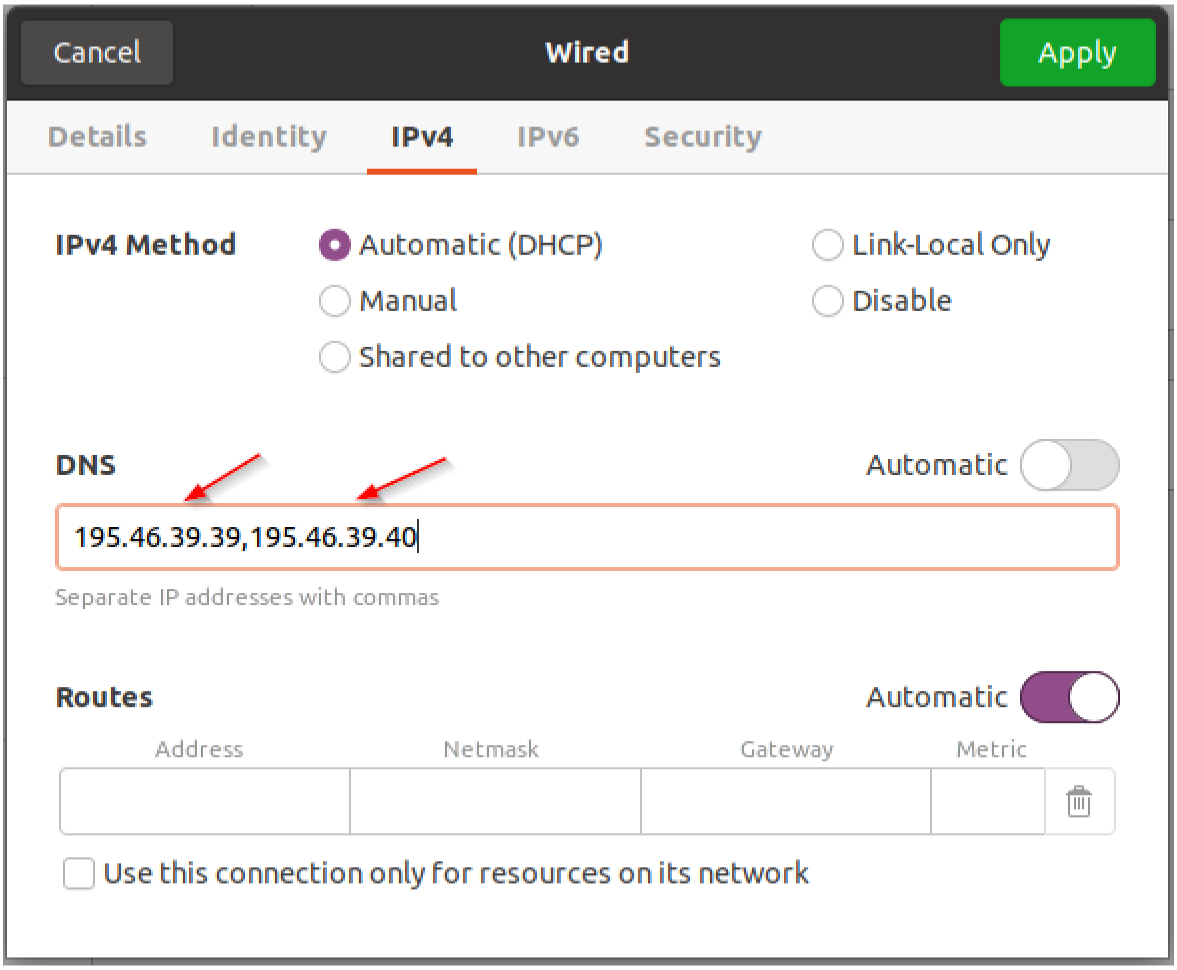
If you configure the network through NetworkManager, it will be sufficient to add SafeDNS servers there.

Open the settings of the current Network Interface.



Add SafeDNS servers: **195.46.39.39** and **195.46.39.40**.

Please note, that servers must be separated by a comma.



IPv4 Method ● Automatic (DHCP) ○ Link-Local Only
○ Manual ○ Disable
○ Shared to other computers

DNS Automatic ○

195.46.39.39,195.46.39.40

Separate IP addresses with commas

Routes Automatic ●

Address	Netmask	Gateway	Metric

□ Use this connection only for resources on its network

Otherwise, you need to find out which application is used for the network settings and add SafeDNS servers there.

Your Linux device is now filtered with the SafeDNS filtering policy.

Please note that settings take 5-7 minutes to apply.
Stats and filtering status update every 10 minutes.