

Linux OS

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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 screenshot shows the SafeDNS dashboard interface. On the left is a sidebar menu with options: Main, User administration, Settings, Categories, Allowlist, Denylist, Stats, New Stats (Beta), Help, and Account. The main content area has a top status bar indicating 'Filtering is enabled'. Below this, a message states: 'The statistics will be visible in approx 10 minutes. You can grab a coffee while we prepare the statistic for you.' The 'Getting started' section features a 'Setup guide for:' row with buttons for Routers, Windows, Linux (highlighted with a red arrow), MacOS, Android, and iOS. Below the buttons, the 'Linux' section contains two steps: '1. Download the Agent for Linux .deb / .rpm' (with red arrows pointing to the package formats) and '2. Follow the instructions and install Agent'. A 'Guide' button is located at the bottom left of the Linux section. On the right side of the dashboard, there is an 'Account' section showing 'Your IP address' and a 'Tutorial' button with a play icon.

.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.

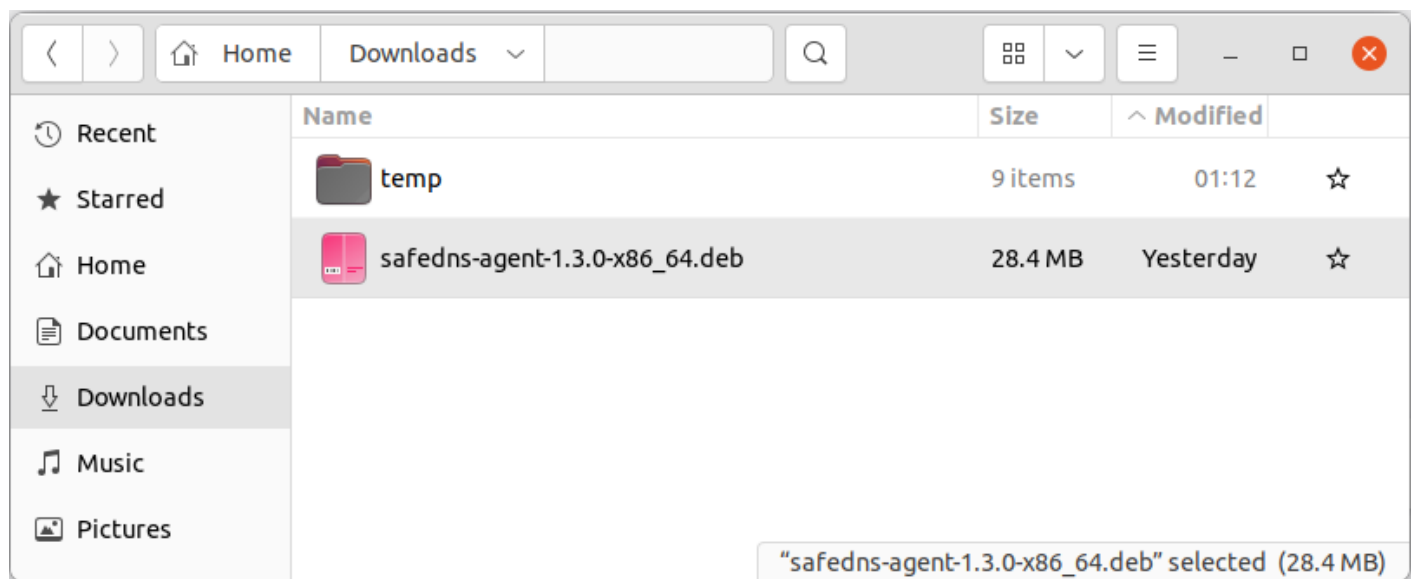
.deb package

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

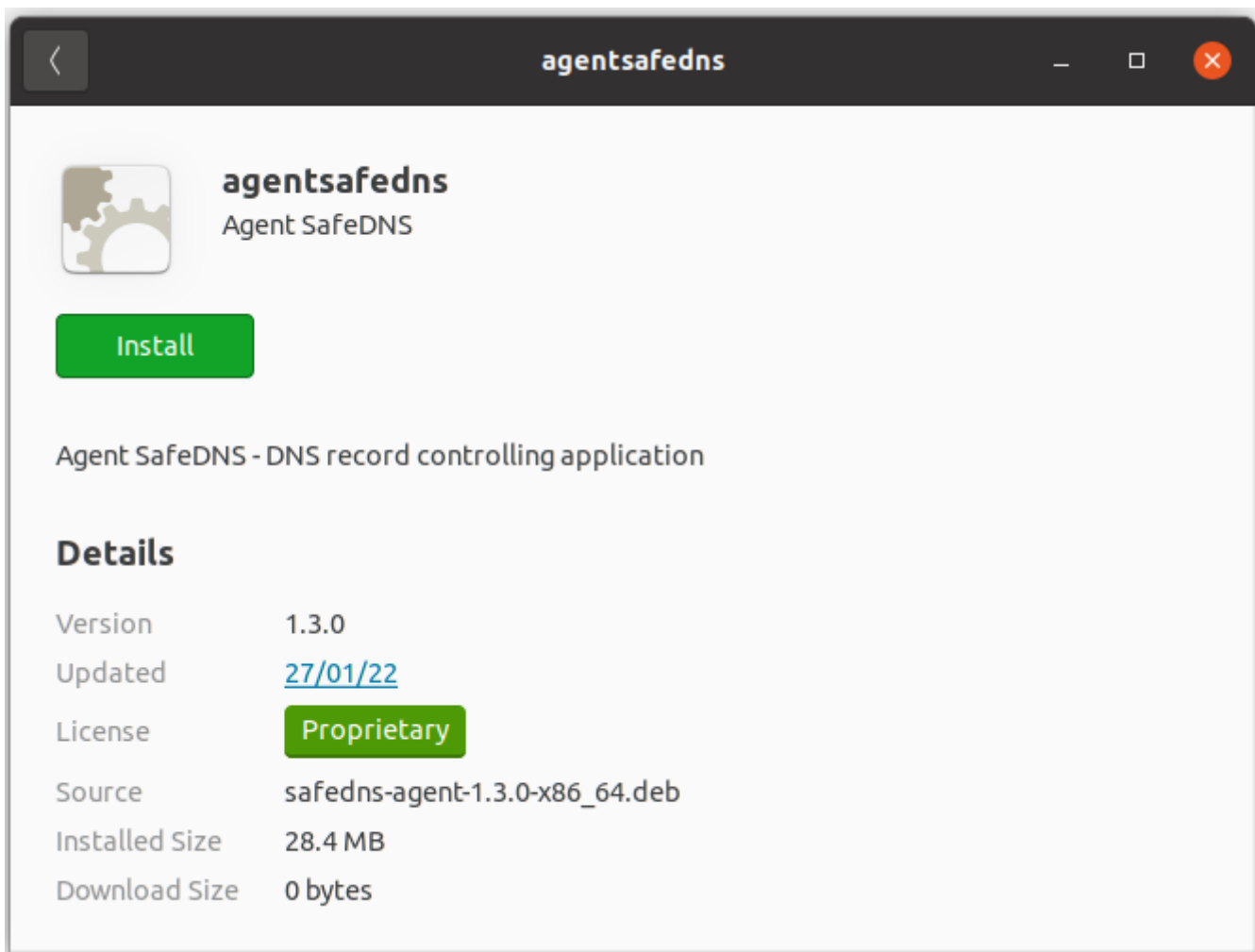
```
sudo dpkg -i /home/user/Downloads/safedns-agent-1.3.1-x86_64.deb
```

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

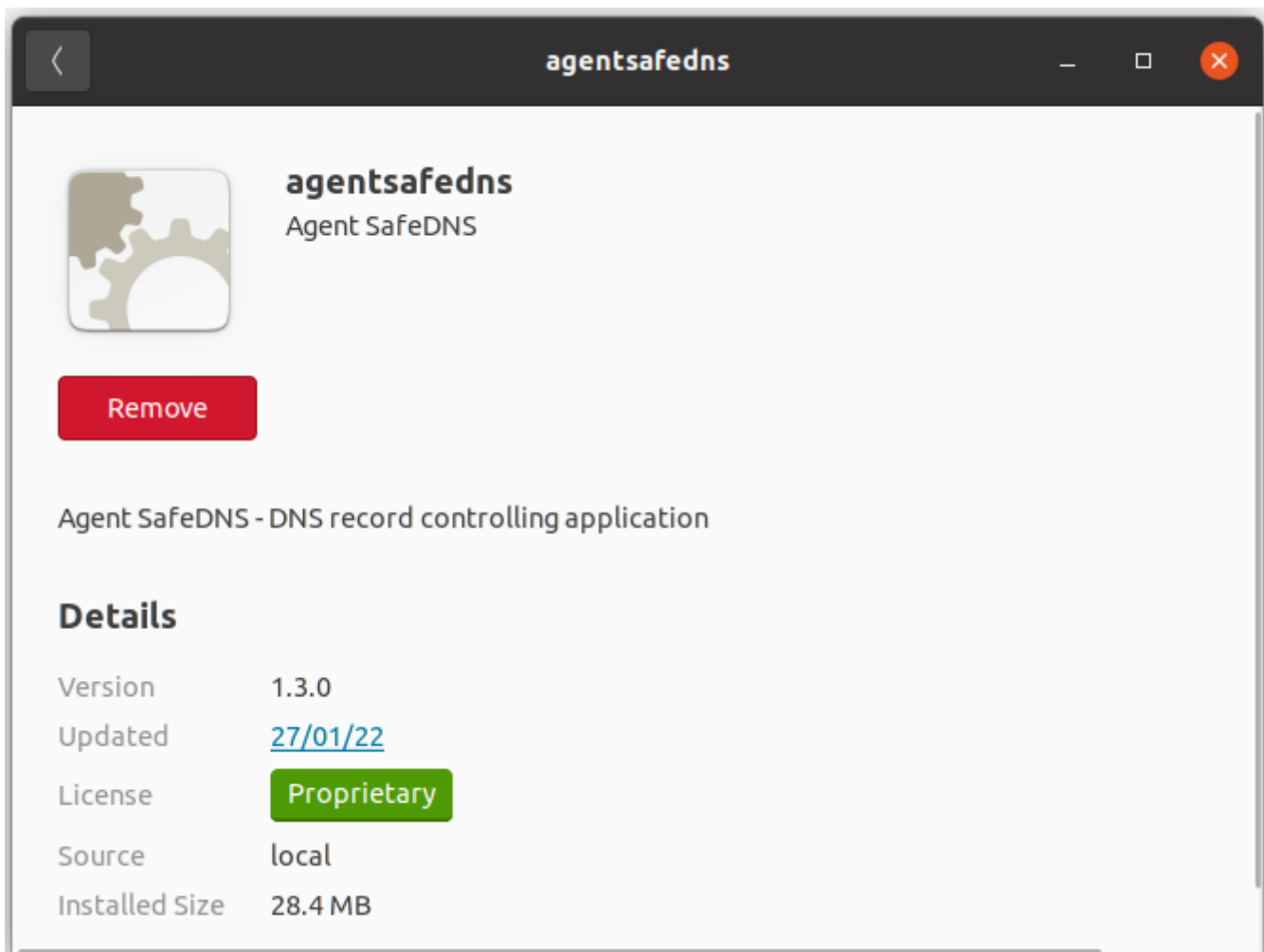
1. Open the “Downloads” folder:



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

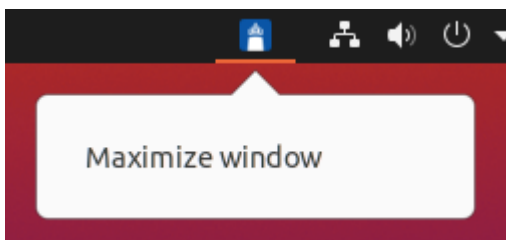


3. You will see the following window once the installation finishes:

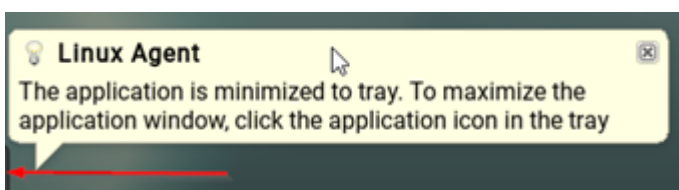


Agent Setup

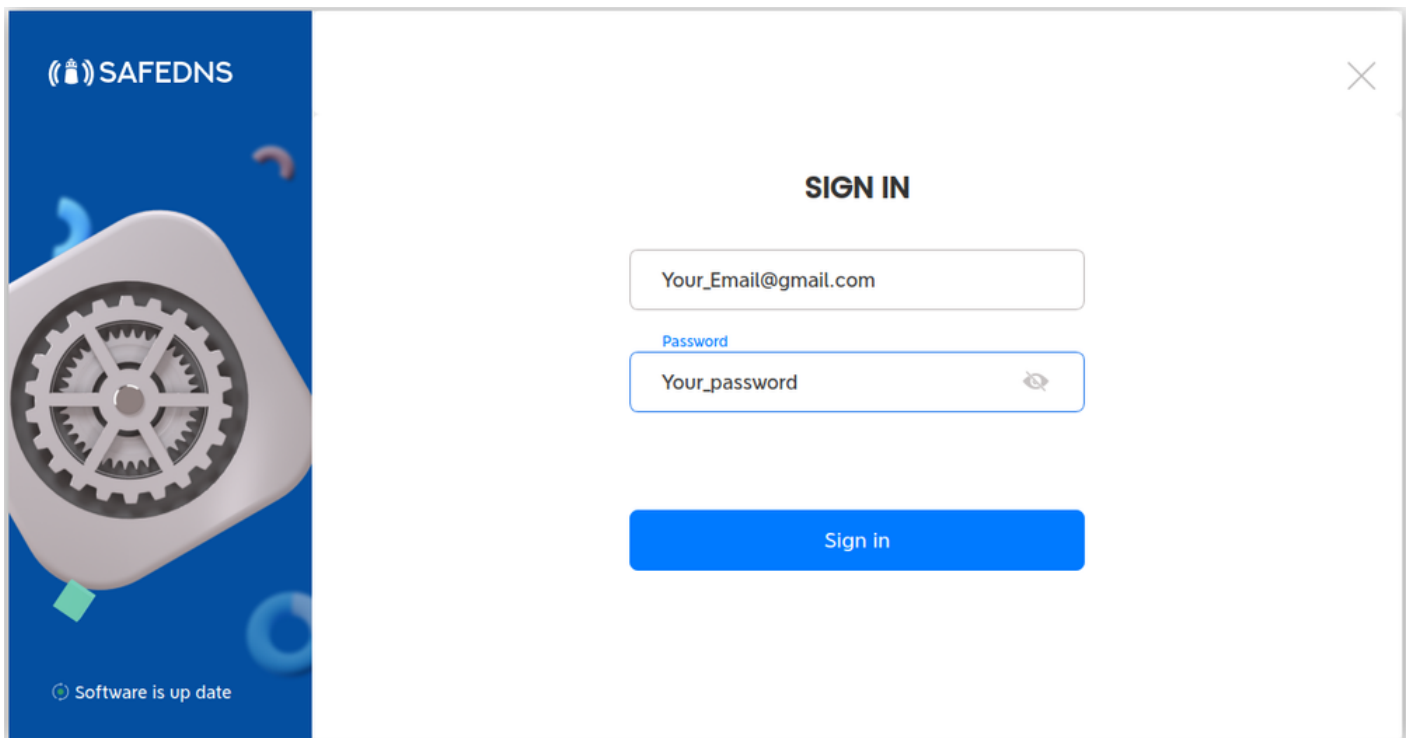
1. **Restart your system.** The Agent icon will appear in the system tray.
2. Open the Agent by clicking on the icon in the system tray.



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



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



The image shows a 'SIGN IN' window for SafeDNS. On the left is a blue sidebar with the SafeDNS logo, a gear icon, and the text 'Software is up date'. The main area is white and contains the title 'SIGN IN', an email input field with placeholder 'Your_Email@gmail.com', a password input field with placeholder 'Your_password' and a toggle icon, and a blue 'Sign in' button.

SIGN IN

Your_Email@gmail.com

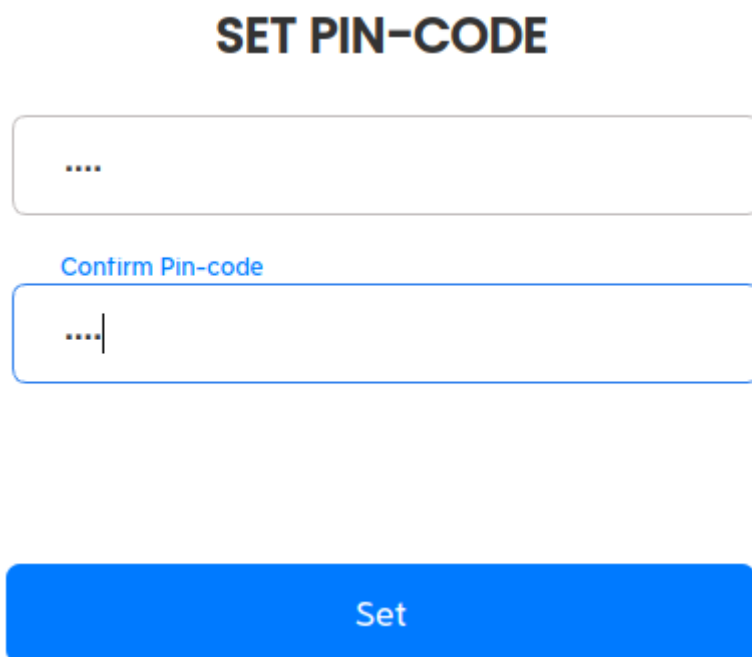
Password

Your_password

Sign in

Software is up date

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



The image shows a 'SET PIN-CODE' form. It has a title 'SET PIN-CODE', a PIN input field with four dots, a 'Confirm Pin-code' label, a confirmation input field with four dots and a cursor, and a blue 'Set' button.

SET PIN-CODE

....

Confirm Pin-code

....|

Set

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

PIN-CODE


Pin-code

Sign in

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.



Policy

System information

Debug

Software is up date

Account

Your IP adress
58.181.128.28

Billing Plan

Safe@Off...

Next payment

31 Dec. 2022

☒ DEFAULT


☐ MOBILE-PHONE

☐ KIDS

☒ Filtering enabled

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.



PolicySystem informationDebug

Software is up date

AccountYour IP address58.181.128.28


Billing PlanSafe@Off...Next payment31 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



Copy to clipboard

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.



PolicySystem informationDebug

Software is up date

AccountYour IP address58.181.128.28

Billing PlanSafe@Off...Next payment31 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



Send report

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.

Agents				
<div>Agent × 🔍</div>				
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.

⋮ Main

⋮ User administration

⚙ Settings

☰ Categories

Categories

AppBlocker

⋮ Allowlist

⊖ Denylist

📈 Stats

📈 New Stats (Beta)

📖 Help

👤 Account

CategoriesAppBlocker

Video instruction for setting up

PolicyDefault

Use the Allowlist only

Save changes

RecommendedAll categories

Close All

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

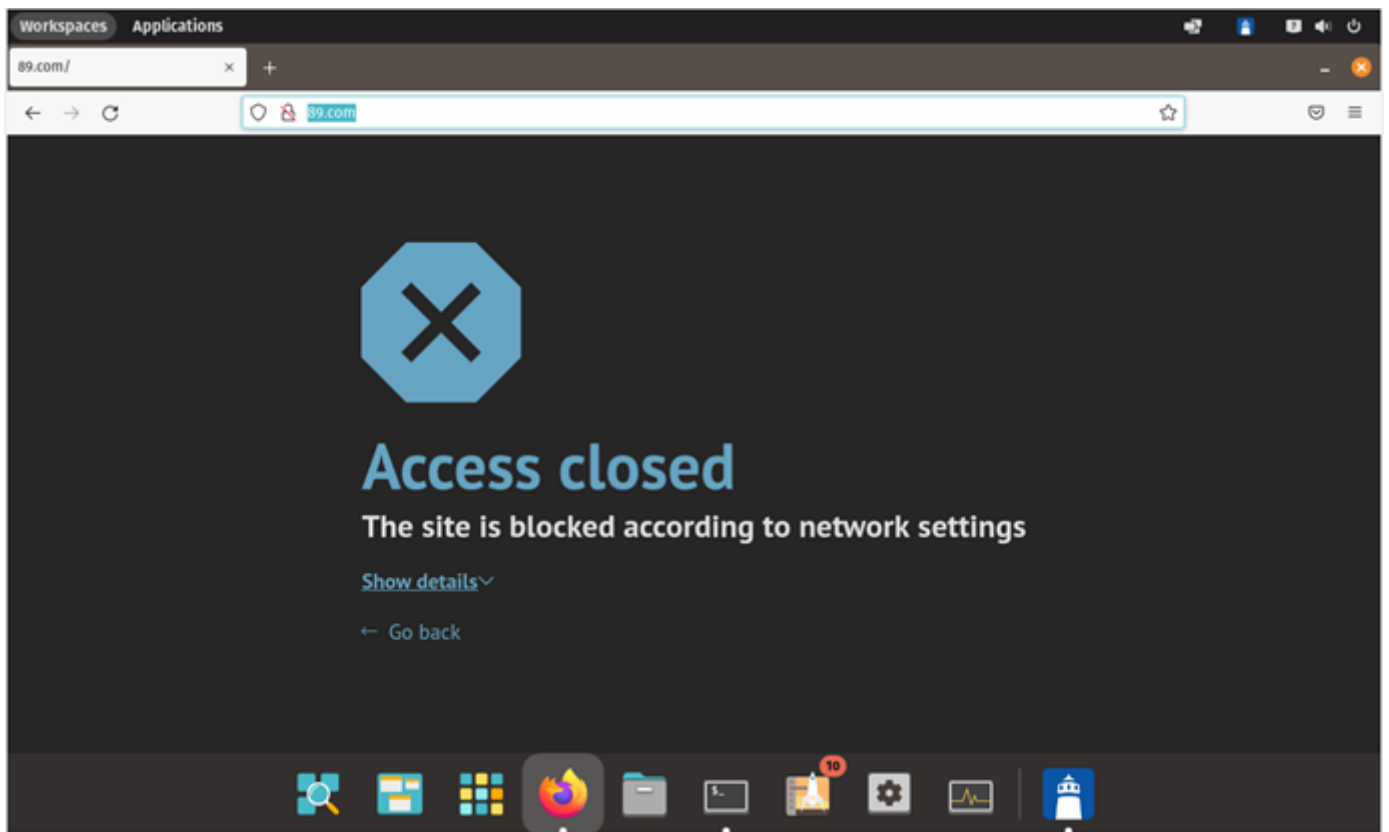
Hate & Discrimination

Tasteless

VPN, Proxies & Anonymizers

The setup is complete!

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



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:

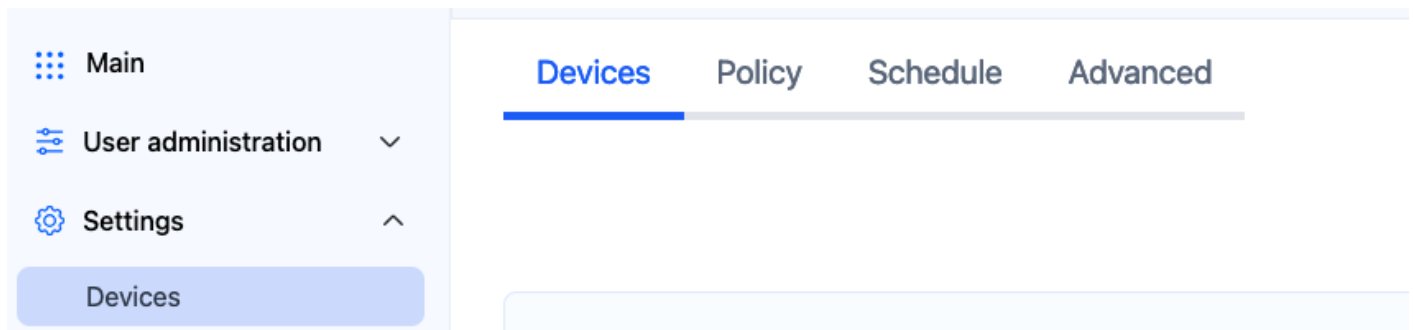
```
sudo apt-get remove agentsafedns
```

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.

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.



A screenshot of the 'VPN' section in the SafeDNS dashboard. At the top, it says 'VPN 0/25' with an up arrow icon on the right. Below this is a section titled 'Add VPN'. It contains a text input field with 'Home Network' inside, a dropdown menu showing 'Default', and a blue 'Add' button. Below the 'Add VPN' section is a search bar with 'VPN' inside, an 'x' icon, and a magnifying glass icon. At the bottom is a table with three columns: 'Name', 'Policy', and 'Certificate'. The 'Name' column contains the text 'List is empty'. The 'Policy' and 'Certificate' columns are currently 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.

The screenshot shows a VPN management interface. At the top, there's a header 'VPN 1/25' with an upward arrow. Below it is an 'Add VPN' section with a text input 'Enter connection name', a dropdown menu set to 'Default', and a blue 'Add' button. Below this is a search bar with 'VPN' entered. A table lists VPN connections with columns 'Name', 'Policy', and 'Certificate'. The first entry is 'Home Network' with 'Default' policy. Under the 'Certificate' column, there are icons for downloading (cloud with arrow) and email (envelope). A red arrow points to the download icon. To the right of the table are edit (pencil) and delete (trash) icons.

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**".

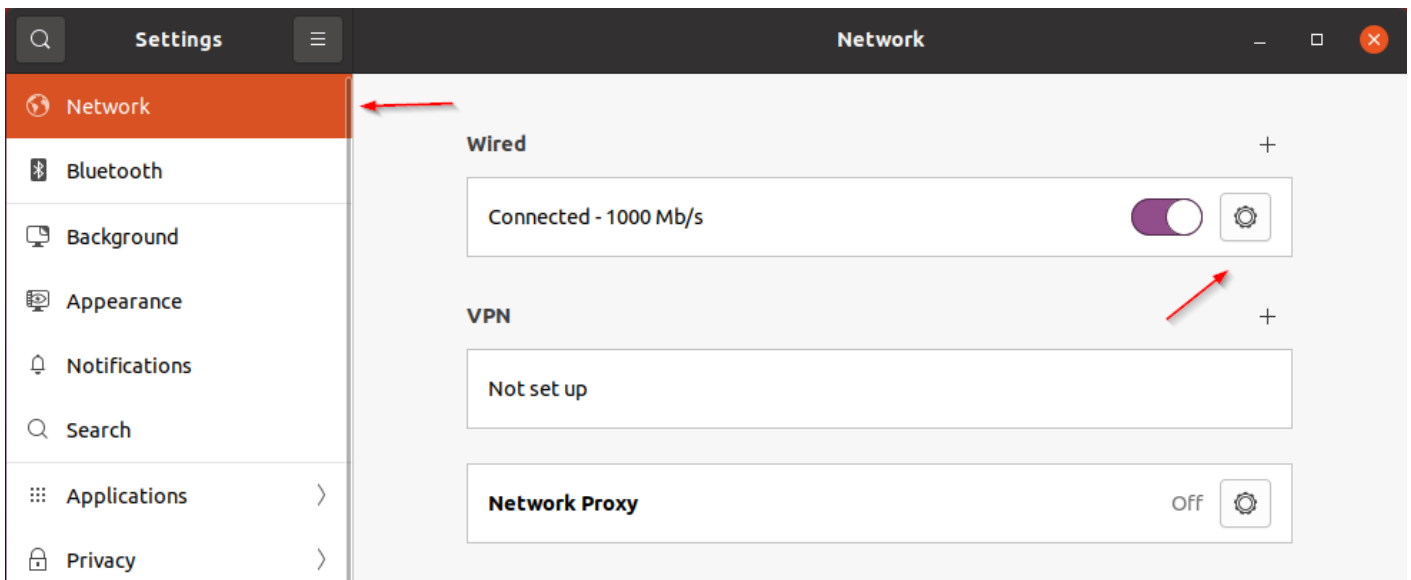
The screenshot shows the SafeDNS dashboard with the following elements:

- Left Sidebar:** Contains navigation links: Main, User administration, Settings (highlighted with a red arrow and '1'), Devices (highlighted with a red arrow and '2'), Policy, Schedule, Advanced, Categories, Allowlist, Denylist, Stats, New Stats (Beta), Help, and Account.
- Top Tabs:** Devices (selected), Policy, Schedule, Advanced.
- Main Content Area:**
 - Your IP address:** A redacted box with a red arrow pointing to it labeled 'Copy ip address'.
 - IPv4 DNS-servers addresses:** 195.46.39.39 and 195.46.39.40.
 - IPv6 DNS-servers addresses:** 2001:67c:2778::3939 and 2001:67c:2778::3940.
 - DoH address:** https://doh.safedns.com.
- IP addresses/DynDNS Section:**
 - Add IP address or DynDNS:** A form with an input field labeled 'Enter an IP-address or DynDNS' (with a red arrow pointing to it labeled 'Past ip address'), a dropdown menu labeled 'Default' (with a red arrow pointing to it labeled 'Select filtering policy'), a 'Comment' field, and 'Add' and 'Edit as List' buttons.
 - Table:** A table with columns 'IP address/DynDNS', 'Policy', and 'Comment'. The first row says 'List is empty'.

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

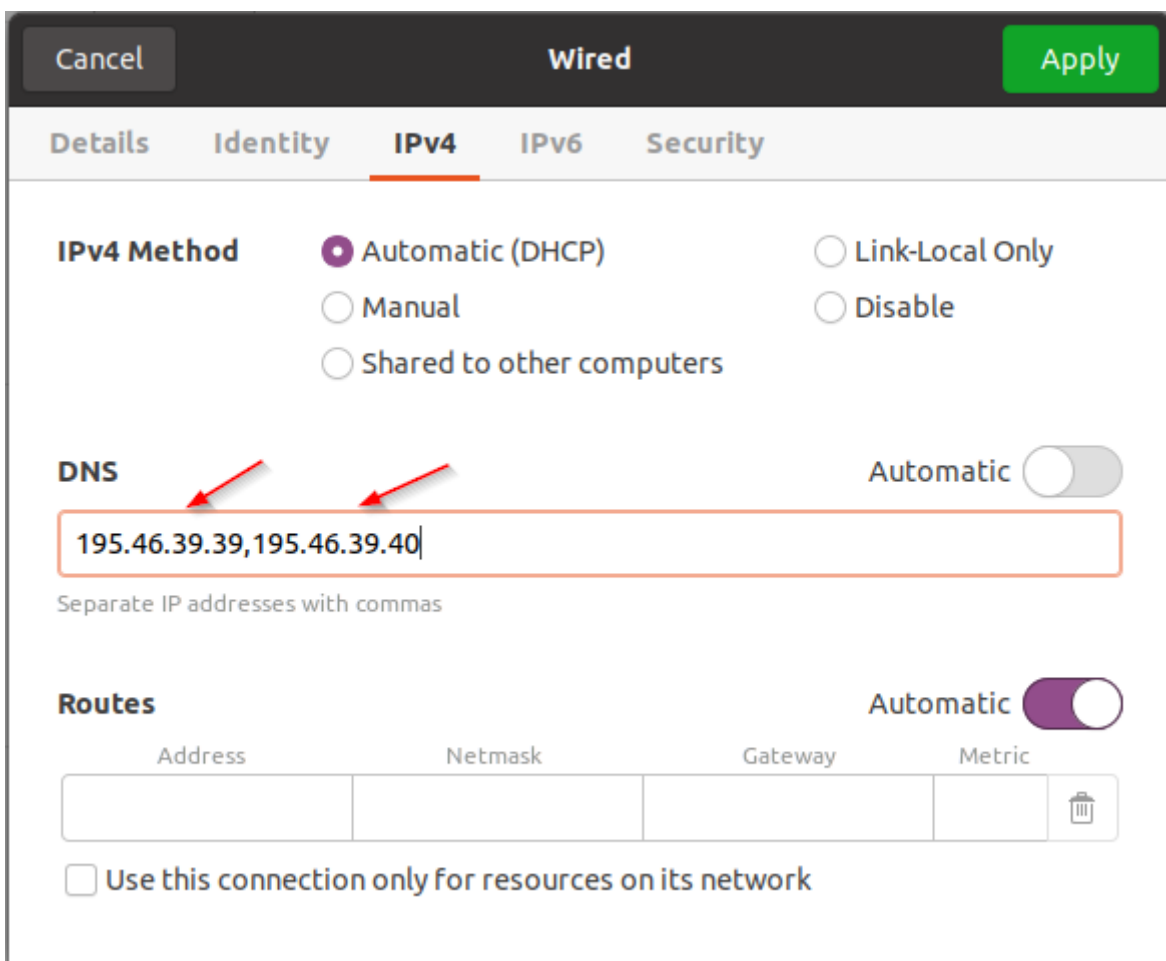
If you configure the network through NetworkManager, it will be sufficient to add SafeDNS servers there.

Open the settings of the current Network Interface.



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

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



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.

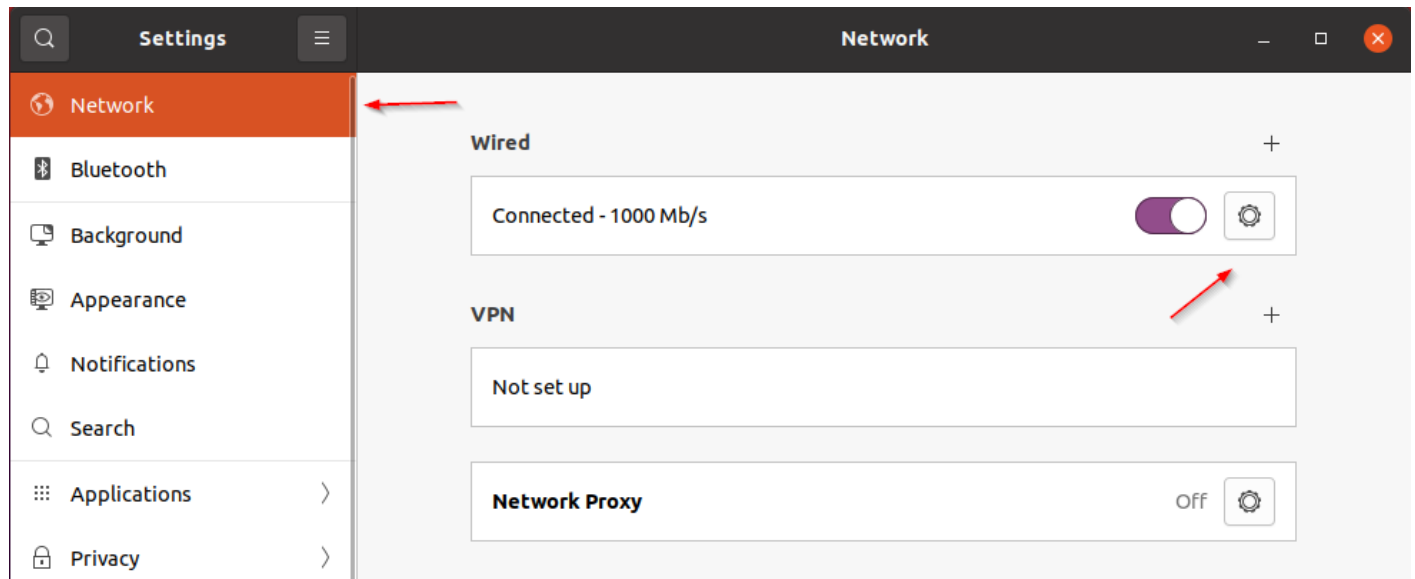
If the similar string is shown in the system logs (/var/log/syslog, /var/log/daemon.log or /var/log/messages), ddclient is successfully configured:

```
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.

Cancel

Wired

Apply

Details

Identity

IPv4

IPv6

Security

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.