

Mikrotik Router Setup

Router with Static IP address configuration

Go to SafeDNS **Dashboard > Settings > Devices** and copy your IP address to the "**IP addresses / DynDNS**" box, choose a policy, and click "**Add**".

The screenshot shows the SafeDNS dashboard interface. The left sidebar is expanded to 'Settings' > 'Devices'. The main area displays configuration for a device, including IP addresses and DNS servers. A table at the bottom shows the current configuration for 'IP addresses/DynDNS' with one entry: '162.210.194.38' under the 'Default' policy. A red arrow points to the 'Add IP address or DynDNS' input field, and another red arrow points to the 'Add' button.

2. Change your router's DNS servers to SafeDNS addresses - **195.46.39.39** and **195.46.39.40**
To do that, open the configuration page of the Mikrotik router, and browse the following option:
Menu > IP > DHCP Server > Networks

The screenshot shows the Mikrotik RouterOS v6.44.5 configuration page for 'Networks'. The left sidebar shows the navigation menu with 'IP' selected. The main area shows the 'Networks' configuration page with an 'Add New' button and a table with one entry: '192.168.88.0/24' with a gateway of '192.168.88.1'. The table has columns for 'Address', 'Gateway', 'DNS Servers', 'Domain', 'WINS Servers', and 'Next Server'.

3. Select the "Network" used by the DHCP server and change/add the SafeDNS addresses - 195.46.39.39 and 195.46.39.40. Replace the DNS servers if there was configured any:

RouterOS v6.44.5 (long-term)	
<input type="button" value="OK"/> <input type="button" value="Cancel"/> <input type="button" value="Apply"/> <input type="button" value="Remove"/>	
Address	<input type="text" value="192.168.88.0/24"/>
Gateway ▼	<input type="text" value="192.168.88.1"/> ▲
Netmask ▲	<input type="text" value="24"/>
No DNS	<input type="checkbox"/>
DNS Servers	<input type="text" value="195.46.39.39"/> ▲
	<input type="text" value="195.46.39.40"/> ▲
Domain ▼	
WINS Servers ▼	
NTP Servers ▼	
CAPS Managers ▼	
Next Server ▼	
Boot File Name ▼	
DHCP Options ▼	
DHCP Option Set ▼	
Comment	<input type="text" value="defconf"/>

You have successfully configured your router.

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

Router with Dynamic IP address configuration

Mikrotik Routers has the embedded feature of the Dynamic DNS setup named VPN Access. It can be activated easily from the router with no configuration needed on any DDNS service.

1. Open the main page of the router – the Quick Set Menu and scroll down to the VPN setup:

VPN

VPN Access

VPN Addressmynetname.net

VPN User vpn

VPN Password Hide

2. Activate the VPN access and set the VPN Password. Click the button Apply Configuration in order to save and activate the settings. Copy the VPN address to the clipboard.

3. Go to SafeDNS Dashboard > Settings > Devices paste the VPN address the "IP addresses / DynDNS" box, choose a policy, and click "Add".

- Settings ^
- Devices
- Policy
- Schedule
- Advanced
- Categories v
- Allowlist
- Denylist

Your IP address	IPv4 DNS-servers addresses	IPv6 DNS-servers addresses
162.210.194.38	195.46.39.39 195.46.39.40	2001:67c:2778::3939 2001:67c:2778::3940

IP addresses/DynDNS 0/13 ↓ ↑

Add IP address or DynDNS

Once added, you will see it in the DynDNS section of the Dashboard.

- Main
- User administration v
- Settings ^
- Devices
- Policy
- Schedule
- Advanced
- Categories v
- Allowlist
- Denylist

IP addresses/DynDNS 1/13 ↓ ↑

Add IP address or DynDNS

IP address/DynDNS	Policy	Comment
123abc456.mynetname.net	Default	✎ 🗑

4. Change your router's DNS servers to SafeDNS addresses - **195.46.39.39** and **195.46.39.40**
 To do that, open the configuration page of the Mikrotik router, and browse the following option:
 Menu > IP > DHCP Server > Networks

RouterOS v6.44.5 (long-term)

1 item

	▲ Address	Gateway	DNS Servers	Domain	WINS Servers	Next Server
;;; defconf						
-	192.168.88.0/24	192.168.88.1				

5. Select the "Network" used by the DHCP server and change/add the SafeDNS addresses - 195.46.39.39 and 195.46.39.40. Replace the DNS servers if there was configured any:

RouterOS v6.44.5 (long-term)

Address

Gateway ▼ ▲

Netmask ▲

No DNS

DNS Servers ▼ ▲
 ▼ ▲

Domain ▼

WINS Servers ▼

NTP Servers ▼

CAPS Managers ▼

Next Server ▼

Boot File Name ▼

DHCP Options ▼

DHCP Option Set ▼

Comment

You have successfully configured your router.

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

DoH setup

DoH is supported on all paid plans.

DoH links with policy are available on Education & Non-Profit, Pro, and Pro Plus plans only.

MikroTik router allows to set up DoH connection to SafeDNS.

DoH link without policy

With this setup, all devices connected to the network with IP address added in the SafeDNS Dashboard will be filtered with the selected policy.

If IP address of the router is changed, you need to add a new IP address in the SafeDNS Dashboard.

Navigate to SafeDNS **Dashboard > Settings > Devices**, copy your IP address to the "**IP addresses/DynDNS**" box, choose a policy, and click "**Add**".

The screenshot shows the SafeDNS Dashboard interface. On the left is a navigation menu with options like Main, User administration, Settings, Devices, Policy, Schedule, Advanced, ActiveDirectory, Categories, Allowlist, Denylist, and Stats. The main content area is titled 'Devices' and has tabs for 'Policy', 'Schedule', and 'Advanced'. A 'Video instruction for setting up' link is visible. The configuration fields are as follows:

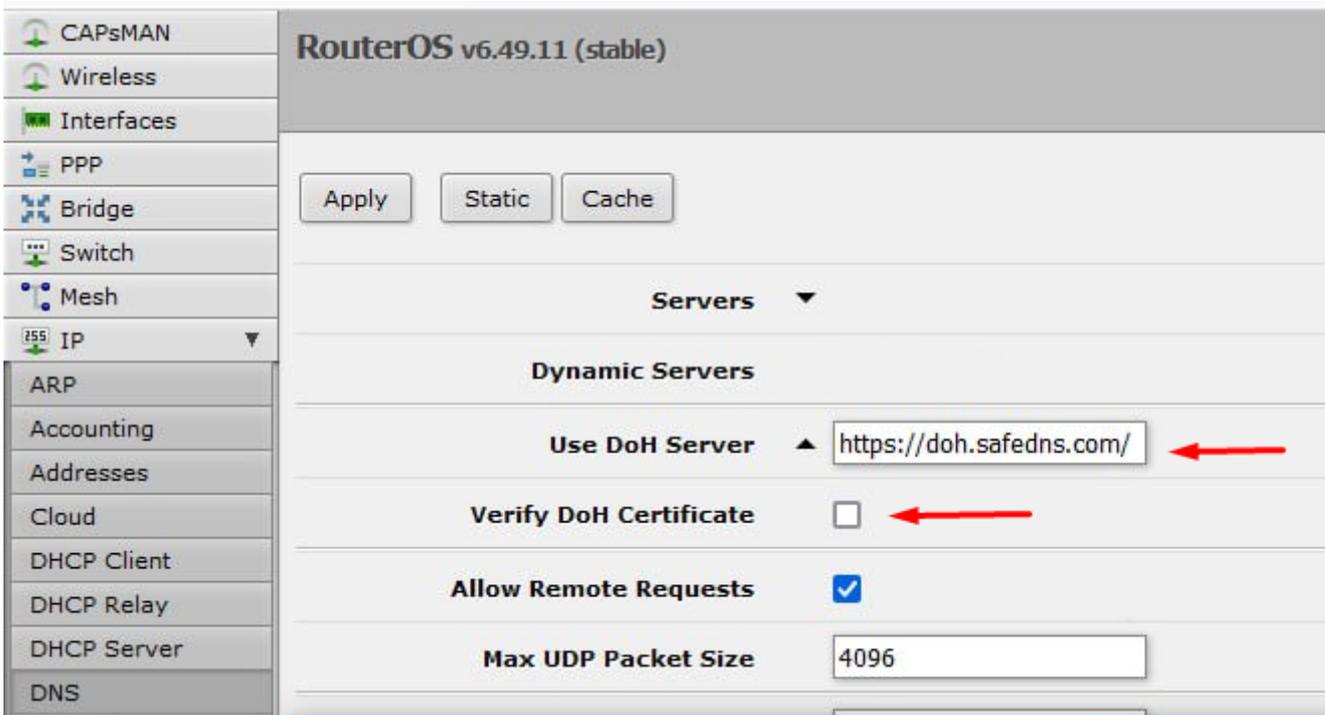
Your IP address	IPv4 DNS-servers addresses	IPv6 DNS-servers addresses	DoH address
162.210.194.38	195.46.39.39 195.46.39.40	2001:67c:2778::3939 2001:67c:2778::3940	https://doh.safedns.com

Below the configuration fields is a section for 'IP addresses/DynDNS' with a table for adding new entries. A red arrow points to the 'Add' button.

IP addresses/DynDNS 1/100			
Add IP address or DynDNS			
<input type="text" value="162.210.194.38"/>	<input type="text" value="Default"/>	<input type="text" value="Comment"/>	<input type="button" value="Add"/>
<input type="button" value="Edit as List"/>			

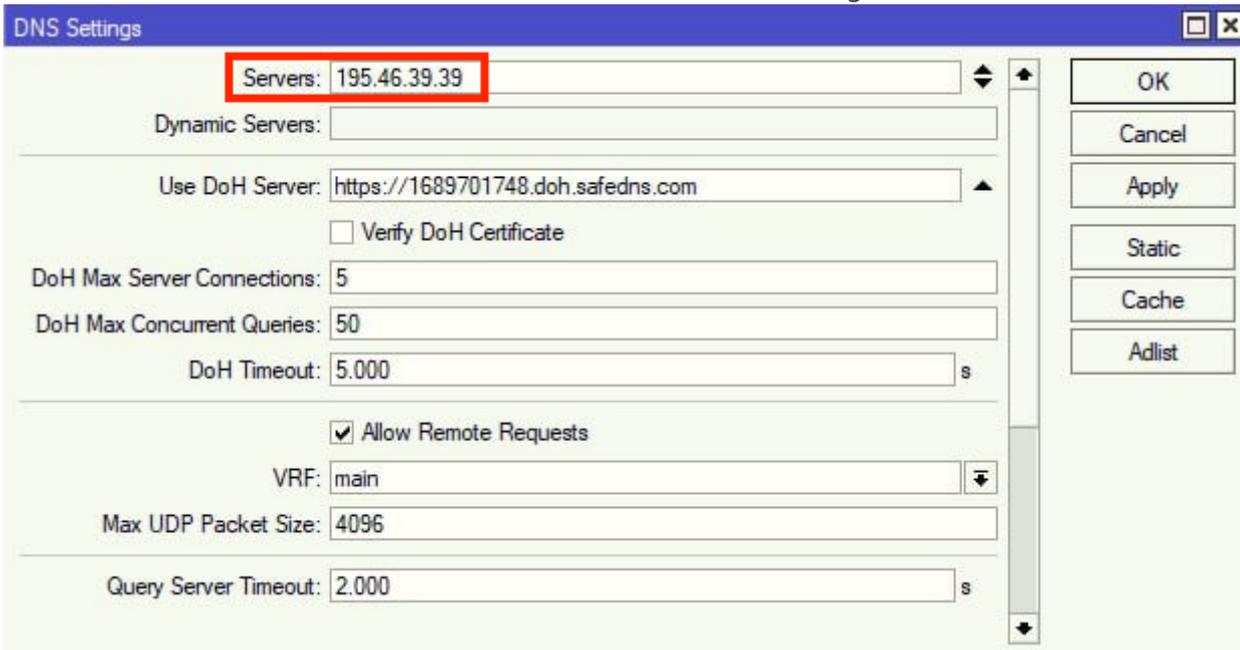
In the MikroTik router:

1. Navigate to **IP > DNS**, enter "https://doh.safedns.com/" in the **Use DoH Server** field, untick **Verify DoH Certificate**, and save the changes.

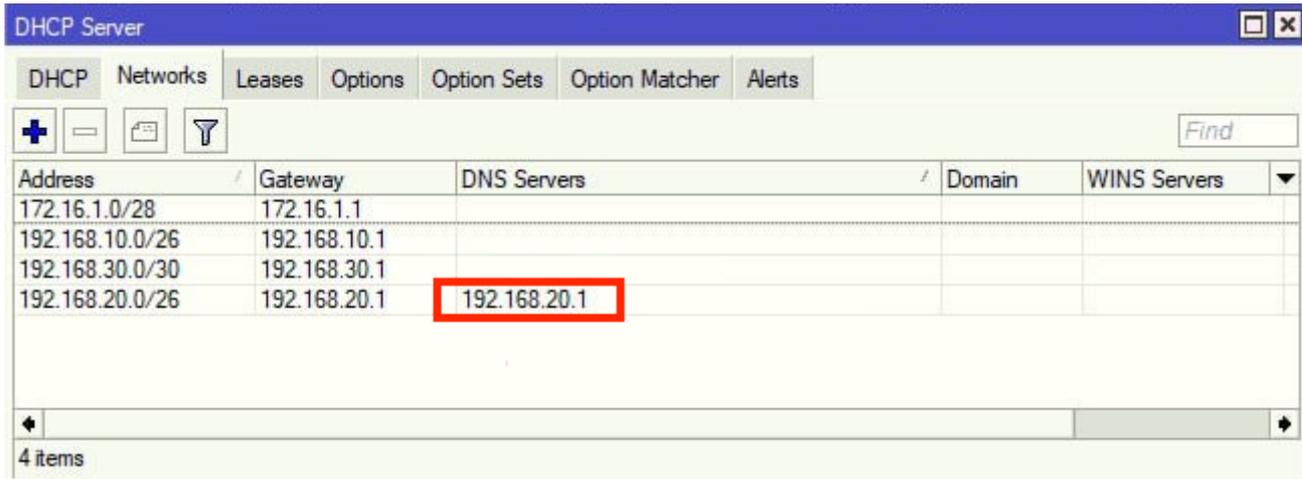


After that, all devices connected to the network with IP address added in the SafeDNS Dashboard will be filtered with the selected policy.

2. Indicate our DNS IP address **195.46.39.39** in DNS Settings:



3. In Network Settings, **each subnet that needs DoH filtering** must have the Gateway IP address configured as the DNS Servers:

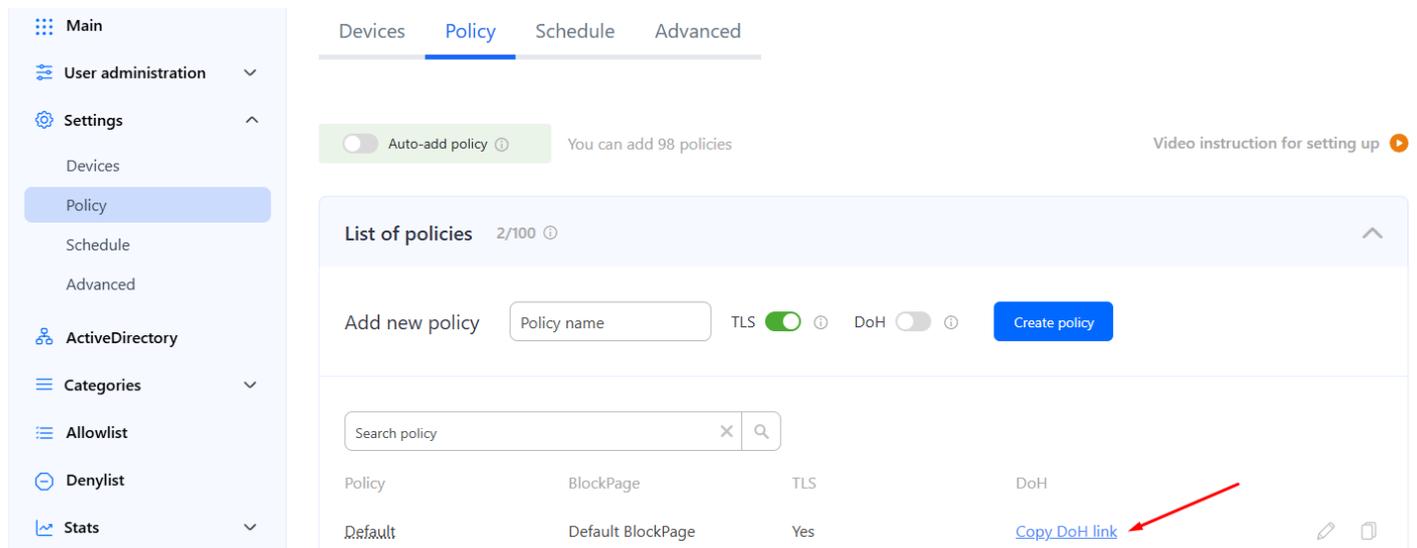


Address	Gateway	DNS Servers	Domain	WINS Servers
172.16.1.0/28	172.16.1.1			
192.168.10.0/26	192.168.10.1			
192.168.30.0/30	192.168.30.1			
192.168.20.0/26	192.168.20.1	192.168.20.1		

DoH link with policy

With this setup, all devices connected to the router will be filtered with the selected policy. Router is identified by the policy token in the link. If the IP address of the router changes, it will not affect the filtering.

1. Navigate to SafeDNS **Dashboard > Settings > Policy**, and copy the DoH link with the policy.



Devices **Policy** Schedule Advanced

Auto-add policy ⓘ You can add 98 policies [Video instruction for setting up](#) 📺

List of policies 2/100 ⓘ

Add new policy TLS ⓘ DoH ⓘ [Create policy](#)

Search policy × 🔍

Policy	BlockPage	TLS	DoH	
Default	Default BlockPage	Yes	Copy DoH link	 

2. In the MikroTik router, navigate to **IP > DNS**, enter the copied link in the **Use DoH Server** field, untick **Verify DoH Certificate**, and save the changes.

RouterOS v6.49.11 (stable)

Apply Static Cache

Servers ▾

Dynamic Servers

Use DoH Server ▲ h.safedns.com/608780

Verify DoH Certificate

Allow Remote Requests

Max UDP Packet Size 4096

3. Follow the steps 2 and 3 from **DoH link without policy**.

After that, all devices connected to the router will be filtered with the selected policy.

Revision #10

Created 10 September 2022 23:42:29

Updated 13 November 2024 13:39:23 by Mickaël Gauthier