

# 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**".

Video instruction for setting up

Your IP address <b>162.210.194.38</b>	IPv4 DNS-servers addresses <b>195.46.39.39</b> <b>195.46.39.40</b>	IPv6 DNS-servers addresses <b>2001:67c:2778::3939</b> <b>2001:67c:2778::3940</b>	DoH address ⓘ <input type="text" value="https://doh.safedns.com"/>
--	--	--	---

IP addresses/DynDNS 1/100

Add IP address or DynDNS

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

RouterOS v6.44.5 (long-term)

DHCP Networks Leases Options Option Sets Alerts

Add New

1 item

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

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:

CAPsMAN

Wireless

Interfaces

Bridge

Switch

PPP

Mesh

IP

ARP

Accounting

Addresses

Cloud

DHCP Client

DHCP Relay

DHCP Server

DNS

Firewall

Hotspot

IPsec

Kid Control

Neighbors

Packing

Pool

Routes

SMB

SNMP

Services

Settings

Socks

TFTP

RouterOS v6.44.5 (long-term)

OK

Cancel

Apply

Remove

Address

192.168.88.0/24

Gateway

▼

192.168.88.1

▲

Netmask

▲

24

No DNS

☐

DNS Servers

▼

195.46.39.39

▲

▼

195.46.39.40

▲

Domain

▼

WINS Servers

▼

NTP Servers

▼

CAPS Managers

▼

Next Server

▼

Boot File Name

▼

DHCP Options

▼

DHCP Option Set

▼

Comment

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

<b>VPN Access</b>	<input checked="" type="checkbox"/>
<b>VPN Address</b>	----- .mynetname.net
<b>VPN User</b>	vpn
<b>VPN Password</b>	<input type="password" value="••••••••"/> <input checked="" type="checkbox"/> 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	
<b>162.210.194.38</b>	<b>195.46.39.39</b>	<b>195.46.39.40</b>	<b>2001:67c:2778::3939</b>	<b>2001:67c:2778::3940</b>

**IP addresses/DynDNS** 0/13  ^

Add IP address or DynDNS

Default v

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

Default v

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

CAPsMAN
Wireless
Interfaces
Bridge
Switch
PPP
Mesh
IP
ARP
Accounting
Addresses
Cloud
DHCP Client
DHCP Relay
DHCP Server

RouterOS v6.44.5 (long-term)

DHCPNetworksLeasesOptionsOption SetsAlerts

Add New

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:

CAPsMAN
Wireless
Interfaces
Bridge
Switch
PPP
Mesh
IP
ARP
Accounting
Addresses
Cloud
DHCP Client
DHCP Relay
DHCP Server
DNS
Firewall
Hotspot
IPsec
Kid Control
Neighbors
Packing
Pool
Routes
SMB
SNMP
Services
Settings
Socks
TFTP

RouterOS v6.44.5 (long-term)

OKCancelApplyRemove

Address

192.168.88.0/24

Gateway ▼

192.168.88.1 ▲

Netmask ▲

24

No DNS

☐

DNS Servers ▼

195.46.39.39 ▲

195.46.39.40 ▲

Domain ▼

WINS Servers ▼

NTP Servers ▼

CAPS Managers ▼

Next Server ▼

Boot File Name ▼

DHCP Options ▼

DHCP Option Set ▼

Comment

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.

## 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**".

Video instruction for setting up

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

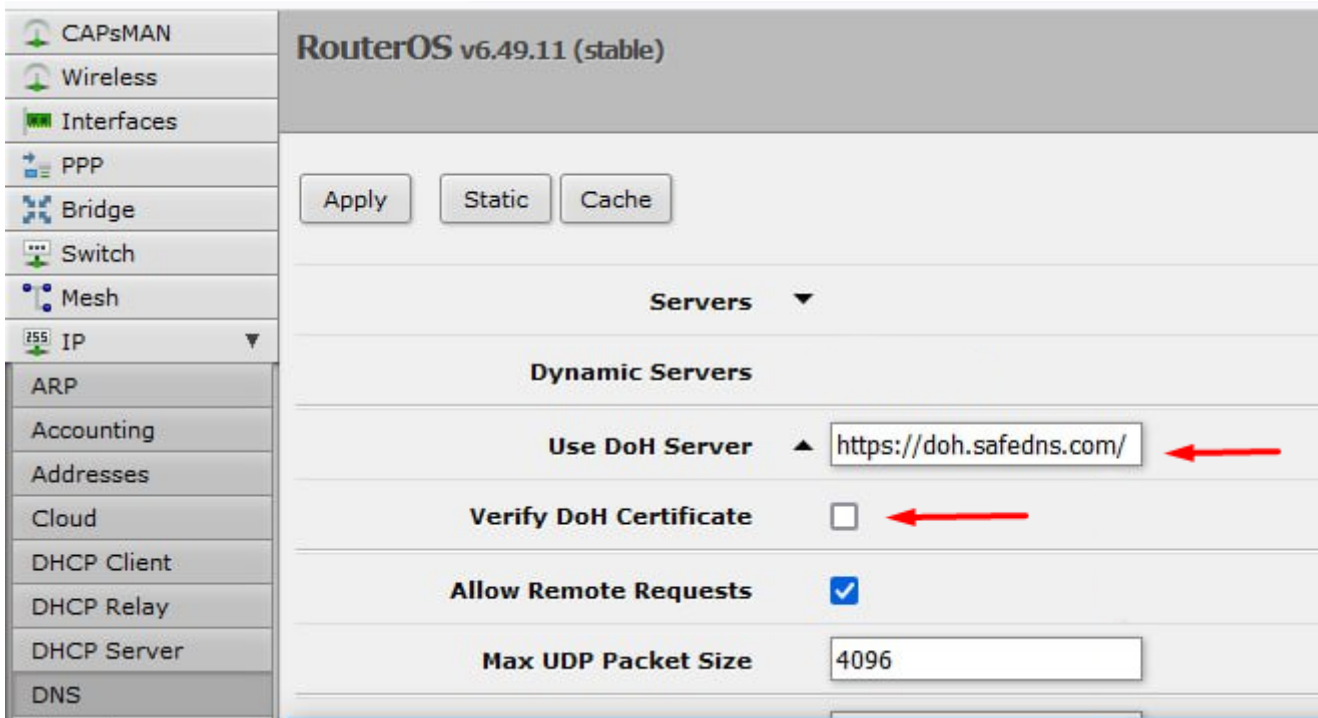
IP addresses/DynDNS 1/100

Add IP address or DynDNS

162.210.194.38 Default Comment Add Edit as List

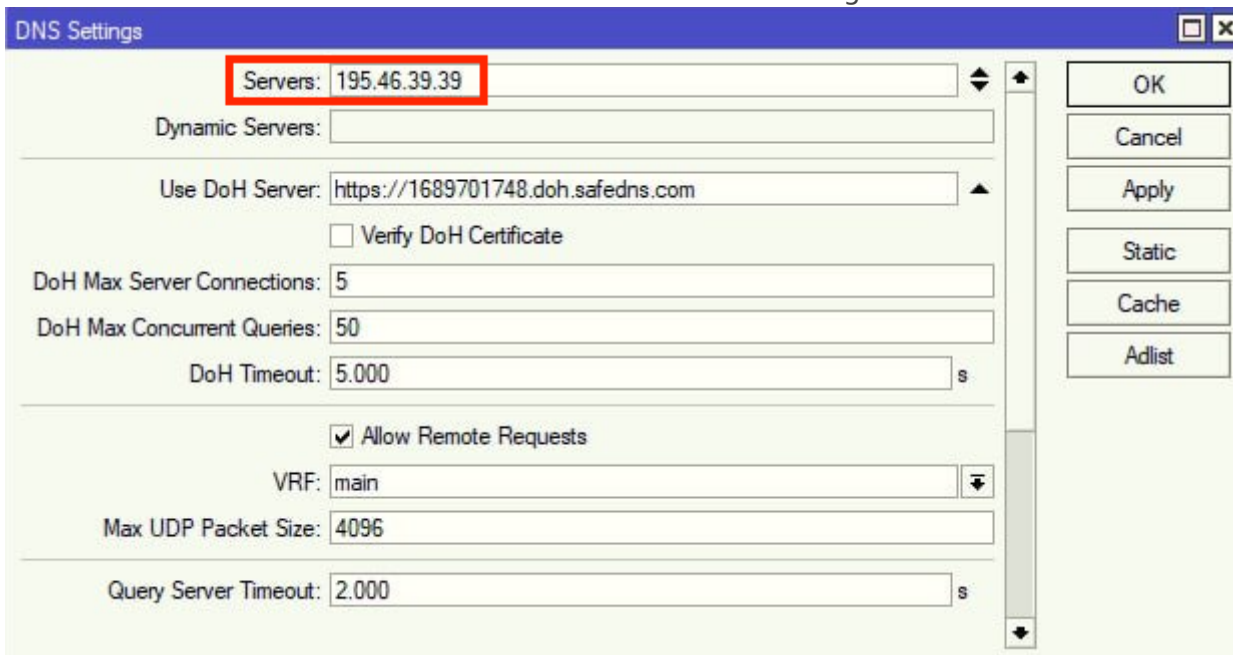
### In the MikroTik router:

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

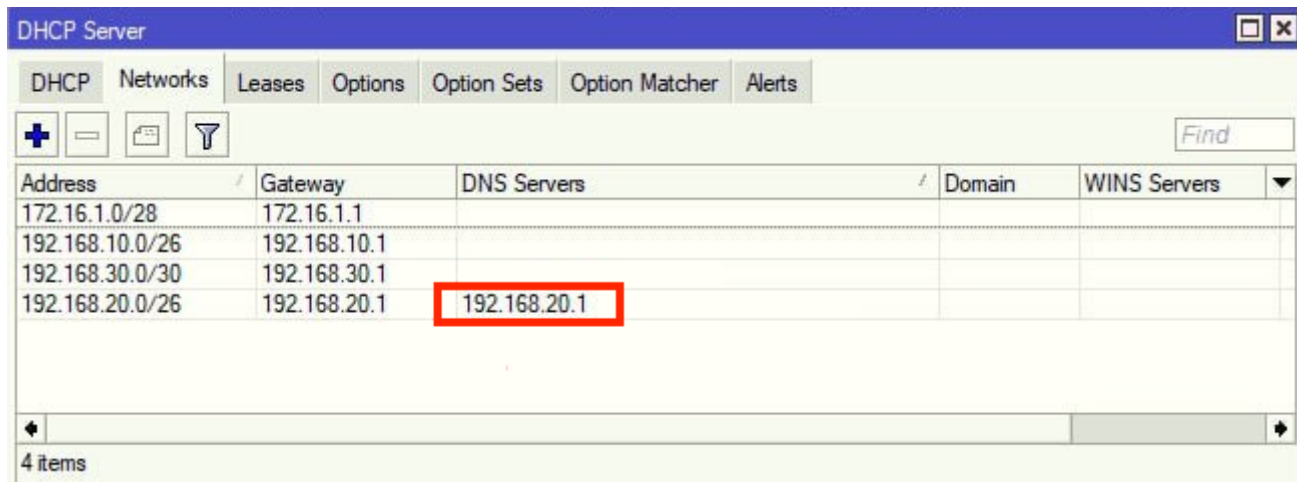


After that, all devices connected to the network with IP address added in the SafeDNS Dashboard will be filtered with the selected policy.

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:

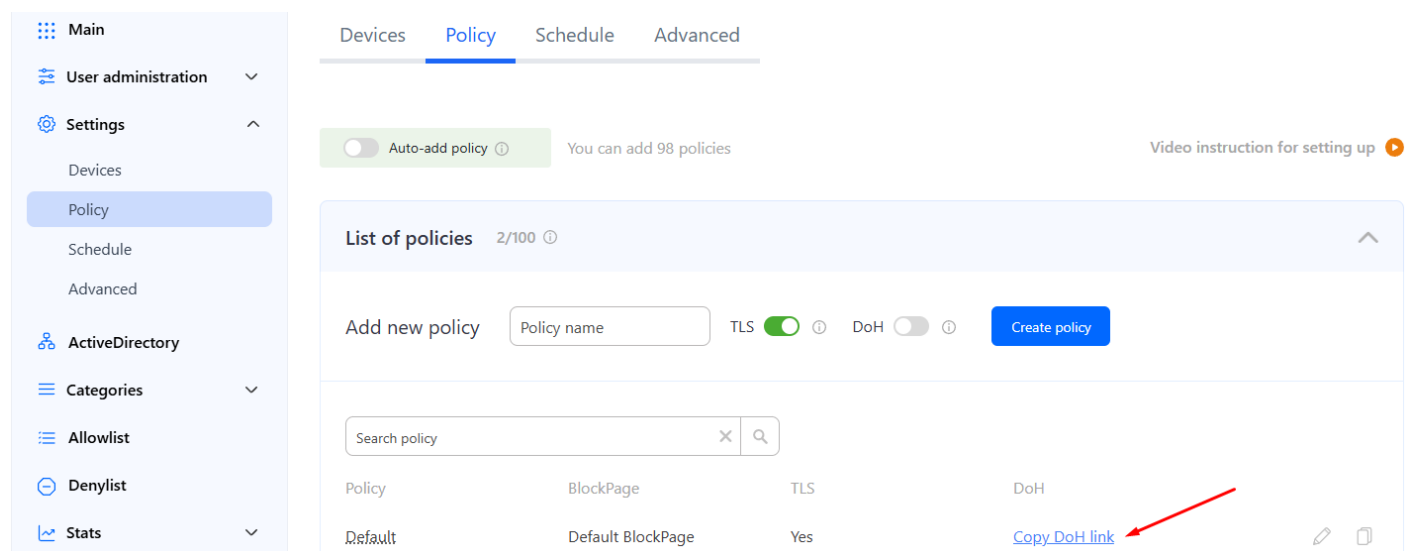


Address	Gateway	DNS Servers	Domain	WINS Servers
172.16.1.0/28	172.16.1.1			
192.168.10.0/26	192.168.10.1			
192.168.30.0/30	192.168.30.1			
192.168.20.0/26	192.168.20.1	192.168.20.1		

## 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 Policy name TLS ☒ ⓘ DoH ☐ ⓘ Create policy

Search policy × 🔍

Policy	BlockPage	TLS	DoH
Default	Default BlockPage	Yes	<a href="#">Copy DoH link</a>

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.

CAPsMAN

Wireless

Interfaces

PPP

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Switch

Mesh

IP

ARP

Accounting

Addresses

Cloud

DHCP Client

DHCP Relay

DHCP Server

DNS

RouterOS v6.49.11 (stable)

ApplyStaticCache

Servers

Dynamic Servers

Use DoH Serverh.safedns.com/608780

Verify DoH Certificate☐

Allow Remote Requests☒

Max UDP Packet Size4096

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.

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