

Setup os-ddclient for when external IP address changes

Here's a step-by-step guide in **English** on how to configure **os-ddclient** in **OPNsense** to automatically update your **Cloudflare DNS records** when your external IP address changes (e.g., from your ISP).

If you get the concept of this then you should be able to do this for DuckDNS or Dynu DNS or one of the other options in a similar way.

Prerequisites

Before you begin:

- You need a **Cloudflare account**.
- You need a domain managed by Cloudflare.
- You should have your **Cloudflare API token** or **API key** (Token is preferred for security).
- `os-ddclient` must be **installed and enabled** in OPNsense (`System > Firmware > Plugins` > install `os-ddclient`).

Step-by-step Configuration

1. Enable os-ddclient

Go to:

- `Services > Dynamic DNS > Settings`
- Check **Enable**
- Click **Save**

2. Add a Dynamic DNS Account

Go to:

- `Services > Dynamic DNS > Accounts`
- Click

Now fill in the required fields:

General Settings

- **Enabled:**
- **Description:** e.g.,
- **Service:**

Cloudflare API Credentials

You have two options: API Token (preferred) or Global API Key.

If you're using an **API Token**:

- **Username:** leave blank >> *there are problem reported when this is filled in and you are using the API key method.*
- **Password:** paste your **API Token**
- Make sure your API token has permission to:
 - Zone: DNS → Edit
 - Zone: Zone → Read

I have made a new API token. When logged in on Cloudflare, go to the top right and click on **Profile**. Then go to **{ } API Tokens** and add a new token for "**Edit zone DNS**". Save the token on a safe place.

The screenshot shows the Cloudflare dashboard interface. At the top left is the Cloudflare logo. At the top right are search and support options. The left sidebar contains navigation links: My Profile, Settings, Authentication, API Tokens (highlighted), and Active sessions. The main content area is titled "User API Tokens" and contains the following elements:

- A "Create Token" button.
- A message: "Cloudflare recommends using [account-owned tokens](#) if you prefer credentials that are not associated with users."
- A table with the following data:

Token name	Permissions	Resources	Status
Edit zone DNS	Zone.DNS	All zones	Active
Edit zone DNS	Zone.DNS	All zones	Active

Below the table is a "Help" link. Underneath is a section for "API Keys" with the text "Keys used to access Cloudflare APIs." and a table:

Global API Key	Change	View
Origin CA Key	Change	View

At the bottom right of the API Keys section is another "Help" link.

If you're using a **Global API Key**:

- **Username / Email:** your Cloudflare account email
- **Password:** your **Global API Key**

The use of the Global API key for this is not recommended!

Hostname Details

- **Wildcard:** usually unchecked unless you want `*.home.example.com` updated too
- **Zone:** your domain name (e.g., `example.com`)
- **Hostname(s):** the DNS record(s) you want to update (e.g., `home.example.com`) >> *when the same API key is used then you can add multiple domain names here.*

IP Settings

- **Check IP Method:** `Interface` (or use `Web` for online IP detection)
- **Interface to monitor:** `WAN`
- **Check ip timeout:** `10` >> default value in minutes. Leave it as it is.
- **Force SSL:** (recommended)

Click **Save**, then **Apply**.

Edit Account ✕

advanced mode full help

Enabled

Description

Service

Username

Password

Wildcard

Zone

Hostname(s) ✕
✕ Clear All 📄 Copy 📄 Paste 📄 Text

Check ip method

Interface to monitor

Check ip timeout

Force SSL

Test the Setup

1. After saving, go to the `Services > Dynamic DNS > Log File`.
 2. Click **Run now** next to your entry to test it.
 3. Check the log to see if the IP update succeeded.
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Done!

Your OPNsense box will now monitor your WAN IP and automatically update your **Cloudflare DNS A or AAAA record** whenever your public IP changes.

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