

# DevProxy

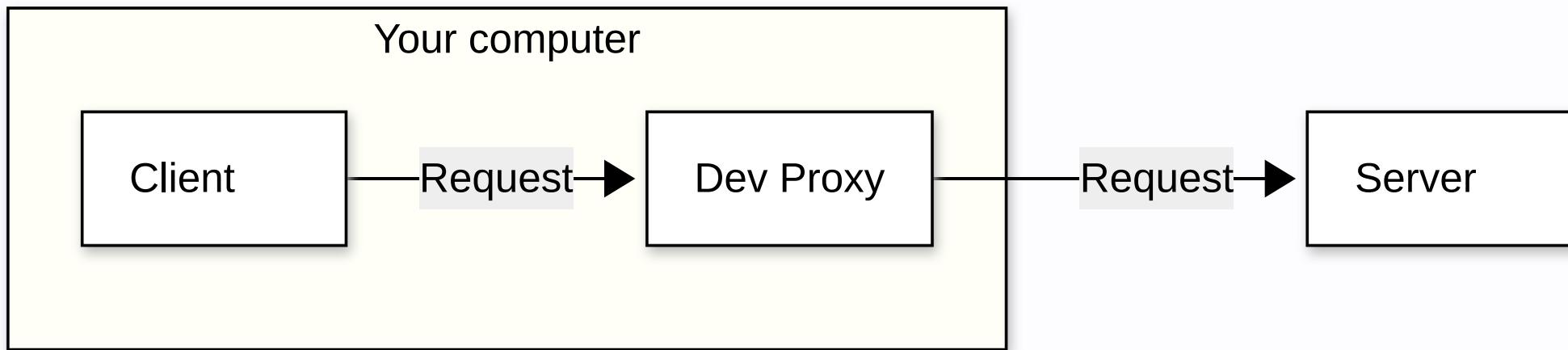
Dev Proxy is an API simulator that helps you  
effortlessly test your app beyond the happy path.

# Story

September 2025 CloudFlare outage on their Cloudflare Dashboard due to repeated calls to their own API - the cause was a useEffect without a dependency.

# What is Dev Proxy?

Dev Proxy is an API simulator that helps you effortlessly test your app beyond the happy path.



What is a proxy?

# For and against (Pro et contra)

## Pros

- Don't have to mock frontend and backend.
- Use whatever script or language you want.
- It was like it was never there - bypass the proxy to return to your regular behaviour.

## Cons

- Takes time to setup.
- Another dependency to install.
- Small learning curve.

# Use Cases

- **Simulate API errors** - on internal (ie. localhost) and external (ie. Microsoft Graph).
- **Add latency** to requests to so you can test your UI display loading data messages.
- Fire **rate limits** and **handle throttling** - test with the `Retry-After` header.

- Stand up **mock APIs and data** - for when the backend is not ready yet
- **Intercept OpenAI-compatible requests** to **analyze costs**
- Check if your API is making requests with **least permissions** with API Center

# Get Started

## Dev Proxy with Garry Trinder



# Local Development

-  Dev Proxy will set itself as the system proxy. You can run commands `Invoke-WebRequest` or `curl`.
-  Chromium\* based browsers (Edge/Chrome) bypass system proxy settings for localhost URLs - you need to exclude localhost URLs from the bypass list.

\*See [documentation](#) for Firefox.

⚠ Save your work beforehand ⚠  
Run this to test localhost

```
taskkill /f /im msedge.exe  
cd "C:\Program Files (x86)\Microsoft\Edge\Application"  
msedge --proxy-bypass-list="<-loopback>" --proxy-server="127.0.0.1:8000"
```

# Usage

```
req      GET http://localhost:3000/meals
time    3/10/2025 1:45:24 AM +00:00
skip
skip
oops
pass   RetryAfterPlugin: Request not throttled
          GenericRandomErrorPlugin: Pass through
          LatencyPlugin: Delaying request for 420ms
          Passed through
```

How does your application handle  
slow responses, rate limits and errors?

# Dev Proxy Toolkit

[VSCode extension](#) is a  
wrapper to the CLI.



# Config

Open the VSCode command palette **CTRL+SHIFT+P**  
and 'Dev Proxy Toolkit: Create configuration file'

Creates **.devproxy/devproxyrc.json**

```
{  
  "$schema": "https://raw.githubusercontent.com/dotnet/dev-proxy/main/schemas/v1.0.0/rc.schema.json",  
  "plugins": [  
    {  
      "name": "RetryAfterPlugin",  
      "enabled": true,  
      "pluginPath": "~appFolder/plugins/DevProxy.Plugins.dll"  
    },  
    {  
      "name": "GenericRandomErrorPlugin",  
      "enabled": true,  
      "pluginPath": "~appFolder/plugins/DevProxy.Plugins.dll",  
      "configSection": "genericRandomErrorPlugin"  
    }  
,  
  "urlsToWatch": [  
    "https://jsonplaceholder.typicode.com/*"  
  ],  
  "genericRandomErrorPlugin": {  
    "errorsFile": "devproxy-errors.json"  
  },  
  "rate": 50,  
  "logLevel": "information",  
  "newVersionNotification": "stable",  
  "showSkipMessages": true,  
  "showTimestamps": true  
}
```

# Plugins

Use [plugins](#) or make your own

- `Auth` - Simulates authentication and authorization using API keys or OAuth2.
- `CachingGuidancePlugin` - Shows a warning when Dev Proxy intercepted the same request within the specified period of time.
- `CrudApiPlugin` - Simulates a CRUD API with an in-memory data store.

- `EntraMockResponsePlugin` - Mocking auth flow API requests.
- `ExecutionSummaryPlugin` - Creates a summary of the requests that pass through the proxy.
- `MockGeneratorPlugin` - Generate mocks from the request.

- `MockRequestPlugin` - test webhooks in your client from dev proxy.
- `RateLimitingPlugin` - Simulates rate-limit behaviors.
- `RewritePlugin` - use rewrite rules - test example.com vs example.local
- `UrlDiscoveryPlugin` - creates a list of requested URLs.
- ... and much more



# Mock and CRUD Plugin

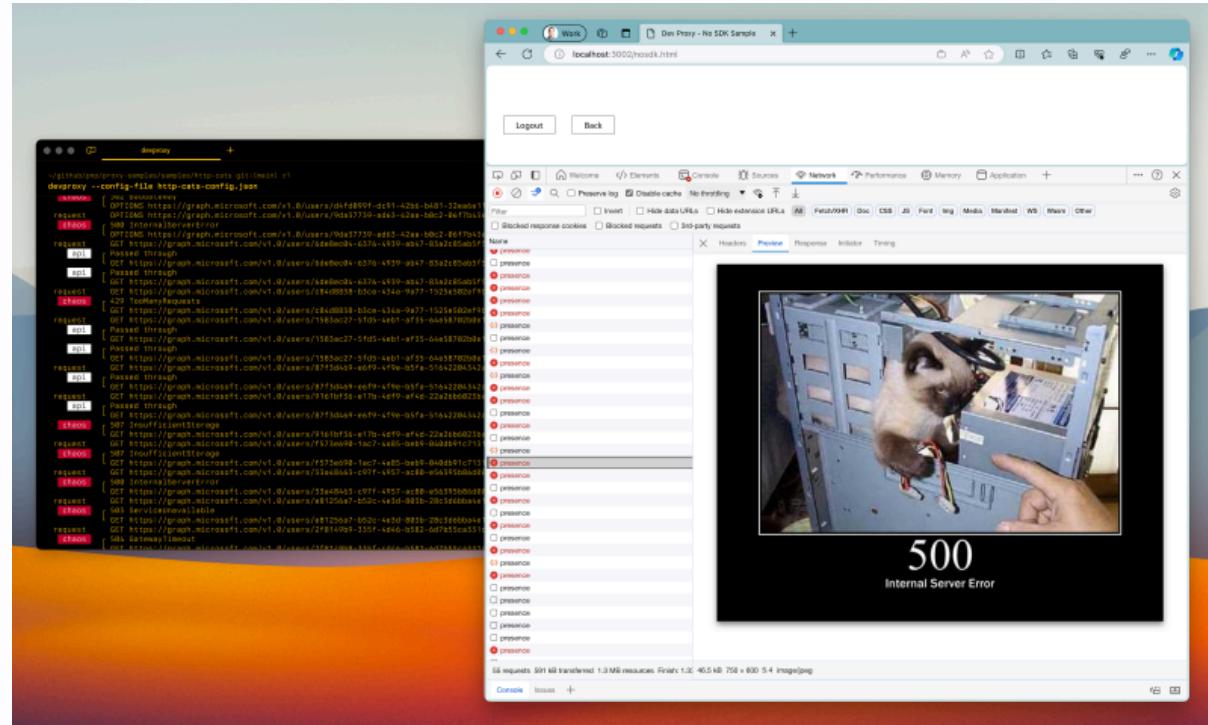
*Return fixed data when your backend is not ready*

- Different data on `nth` request
- Can deliver binary data
- Create a mock CRUD API - mutates in memory and resets on restart.
- Access via `devtunnel` over the internet - have your cloud apps connect to your machine.
- Supports Microsoft Entra

# Samples

[github.com/pnp/proxy-samples](https://github.com/pnp/proxy-samples)

- http cats - return cat images when simulating erroneous HTTP status codes for Microsoft Graph.



# Resources

 View Online [neave.dev/devproxy](https://neave.dev/devproxy)

 Download [PowerPoint](#) and [PDF](#)



Contribute on  [GitHub](#)