# 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.
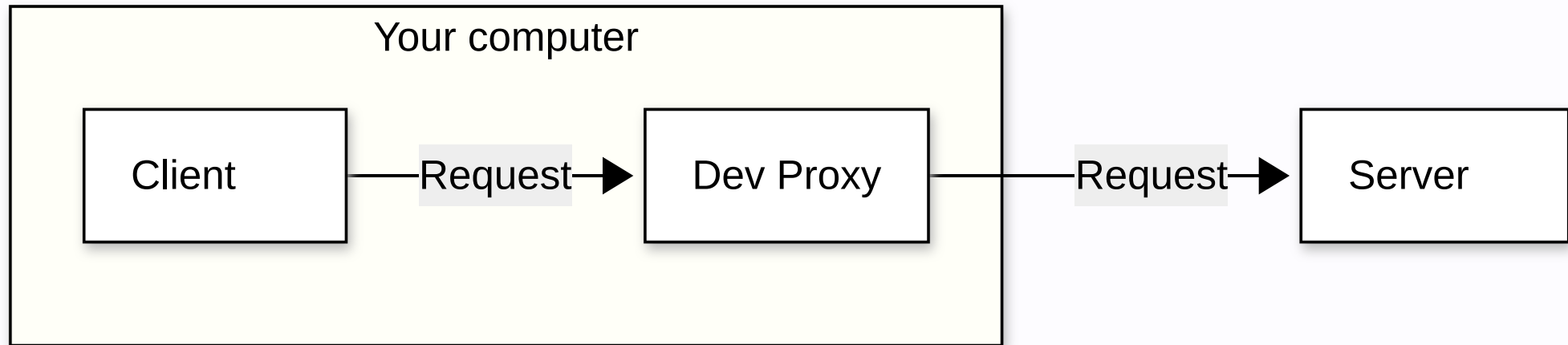
What is a proxy?

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.

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- 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

Local Development

- ✅ Dev Proxy will set itself as the system proxy. You can run commands `Invoke-WebRequest` or `curl`.
- ℹ️ 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

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 create configuration file'

Creates `.devproxy/devproxyrc.json`

```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

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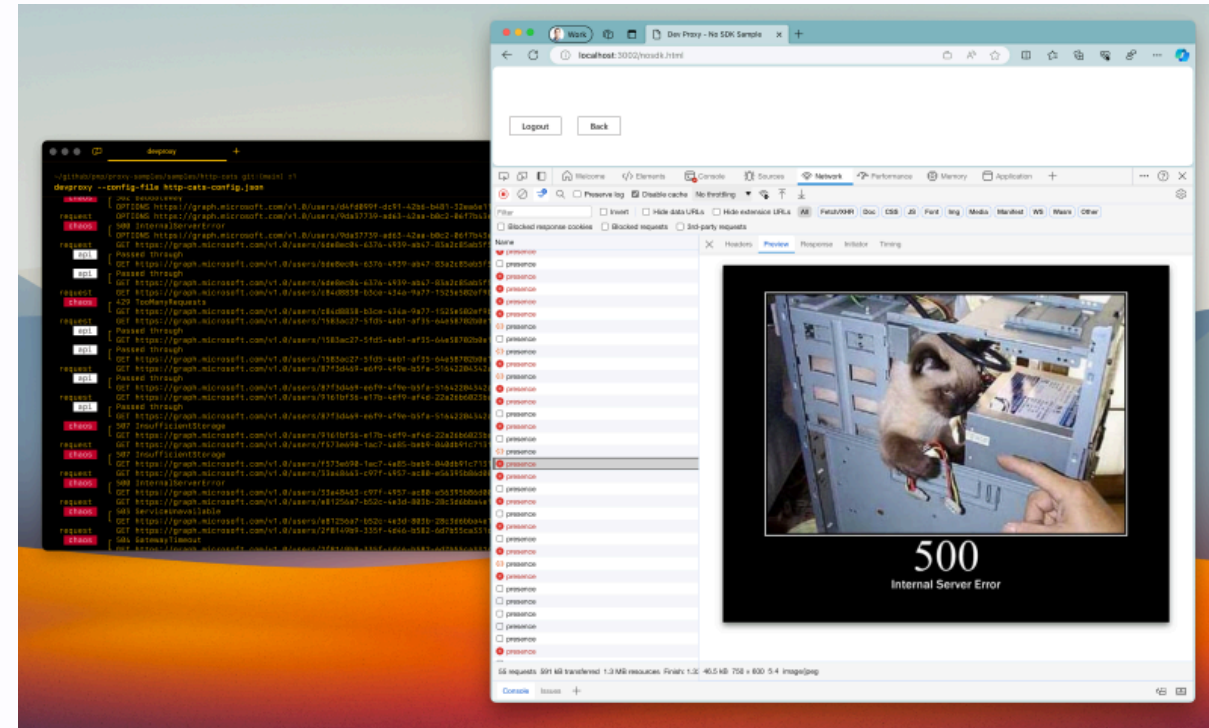
Resources

🔗 View Online neave.dev/devproxy

⬇️ Download PowerPoint and PDF

📝 Contribute on GitHub