DevProxy

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

Foreword

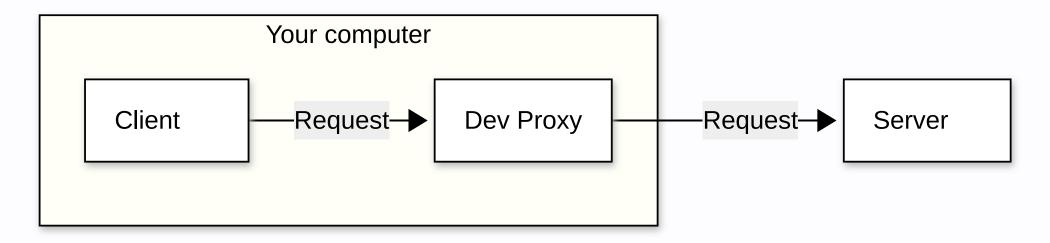
- Contribute on GitHub
- View Online neave.dev/devproxy
 - Download PowerPoint and PDF

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.



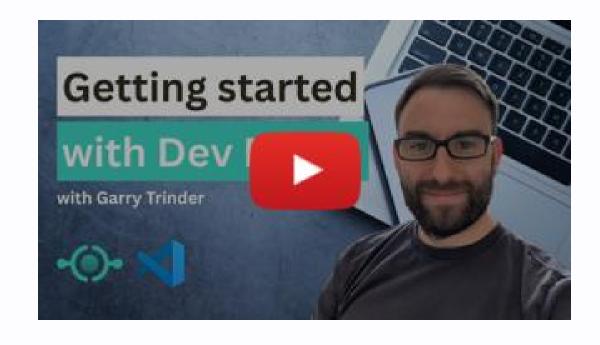
What is a proxy?

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.

- Stand up mock APIs and data for when the backend is not ready yet
- Intercept OpenAl-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.
- ii 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

```
time
skip
skip
oops
pass

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

<sub>How does your application handle
slow responses, rate limits and errors?</sub>

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

```
"$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

- Hopefully this gives you some ideas
- 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 inmemory 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

Focus Mock and CRUD Plugin

Return fixed data when your backend is not ready

- 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