DevProxy

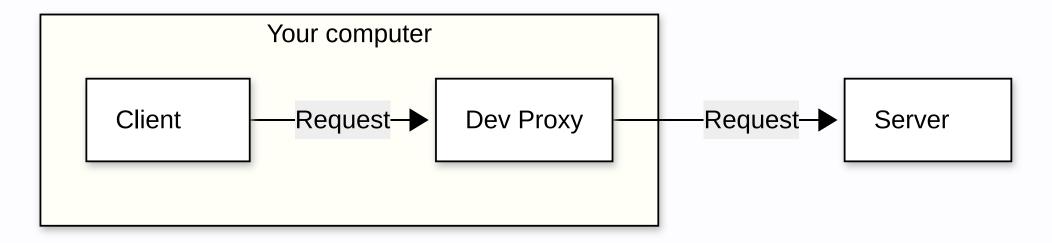
Dev Proxy is an API simulator that helps you effortlessly test your app beyond the happy path.

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.



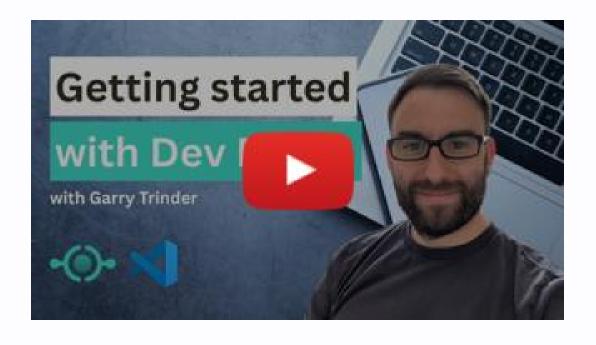
What is a proxy?

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.

- 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.
- 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
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
```

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

```
"$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

Mock and CRUD Plugin

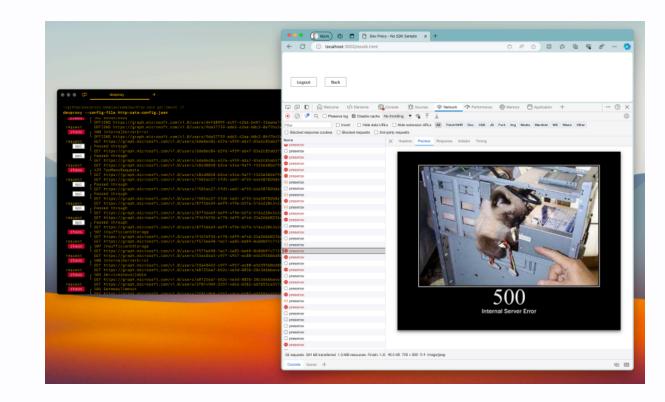
Return fixed data when your backend is not ready

- 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

Samples

github.com/pnp/proxysamples

 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