🦙 Setting up Alpaca on MacOS

Purpose

This guide will walk users through installing and setting up Alpaca.

> This article is generic (not specific to Snyk) but it is a requirement for Snyk as it is for any other CLIs.
>
> For any package installation, always try Self-Service first, as it has a dedicated team for better support. Why writing a MacOS guide if Self-Service offers it?
> At the time of writing the MacOS article, for the MacOS SOE (not the EPZ one), JAMF On-Prem (the former Self-Service) **did** not have a functional Alpaca: It did not detect the PAC URL (I fixed that in 2.0.11) so all connections defaulted to DIRECT (where 95% should be forwarded to Prisma proxy). Then JAMF Cloud (the new/current Self-Service) **did** not have Alpaca packaged... but it now has!

> If you are a Windows user, head this way → 🦙 Setting up Alpaca on Windows

This will help ensure a stable experience when running the Snyk CLI via Command Line and the Snyk IDE Extension.

Installing Alpaca on different OSs

On Mac OS

~~Guide adapted from the Engineering Handbook Guide~~ (I'll need to update the Handbook too)

Step 1: Installing Alpaca

1. Run the command:

```
brew tap samuong/alpaca
brew install samuong/alpaca/alpaca
```

⚠️ Do not install it via Self Service because you then won't be able to make it a daemon (autostart)
Or install it via Self-Service and build your own Daemon, by skipping Step 2. and creating the whole file in Step 3.

Step 2: Enable Alpaca Service (LaunchDaemon/Agent a.k.a autostart)

1. Run the command:

```
brew services start alpaca
```

Step 3: Fix the daemon

There was a tiny (but pesky) bug on Alpaca, where it failed retrieving the PAC URL in MacOS. I've fixed it in version 2.0.11. Keeping the below for learnings (how to tweak homebrew).

~~In the meantime,while waiting for that fix, we need to tweak the Daemon and hardcode the PAC URL. To do so edit~~

`~/Library/LaunchAgents/homebrew.mxcl.alpaca.plist`

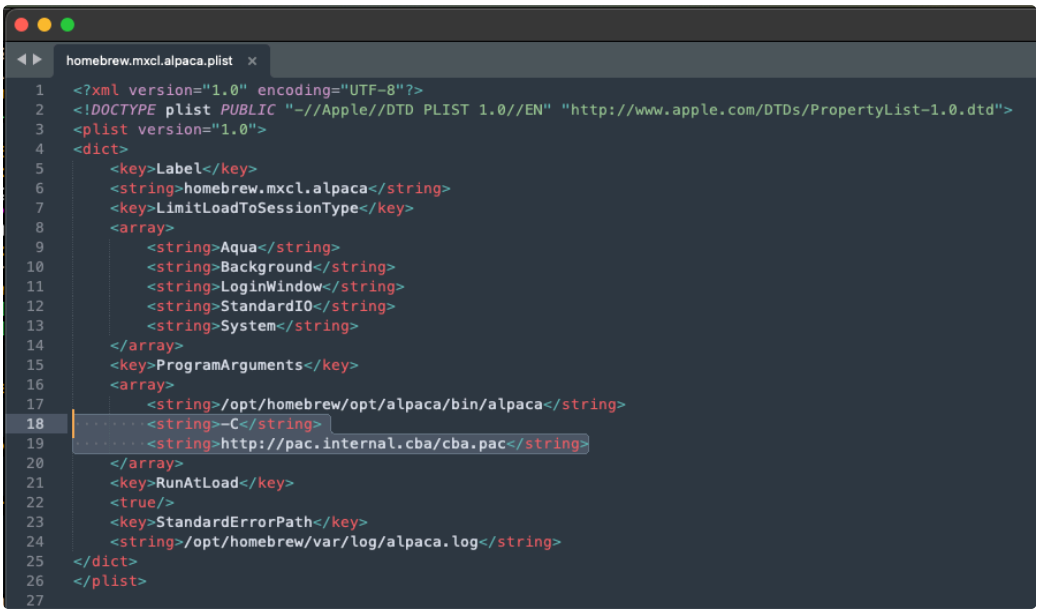
~~and add~~

`<string>-C</string>`

`<string><http://pac.internal.cba/cba.pac</string>`

⚠~~This plist file will only exist if you ran Step 2. already.~~

~~Also it will be overwritten if you ever~~ `brew service stop Alpaca` ~~(do not)~~



~~We do need to reload the Daemon once and for all:~~

```
launchctl unload ~/Library/LaunchAgents/homebrew.mxcl.alpaca.plist
launchctl load ~/Library/LaunchAgents/homebrew.mxcl.alpaca.plist
```

~~Once again DO NOT~~ `brew service stop alpaca` ~~or you'll need to tweak the daemon plist again...~~

~~Voila, your machine can reboot, and Alpaca will always run (persistent) making use of our PAC file (unless our PAC URL changes)~~

Step 4: Instruct your CLI to use Alpaca (Persistent)

1. Open your `~/.zshrc` or `~/.bashrc` and copy and paste these commands into there.

```
# Alias to run Alpaca with pac file and login
alias run-alpaca="GODEBUG=netdns=go alpaca -C "http://pac.internal.cba/cba.pac" -u $(whoami) -d au"
export {all,http,https}_proxy=http://localhost:3128

# Alias to turn on and off local proxy (point to localhost:3128)
alias AlpacaProxyOn="export {all,http,https}_proxy=http://localhost:3128"
alias CharlesProxyOn="export {all,http,https}_proxy=http://localhost:8888"
alias PrismaProxyOn="export {all,http,https}_proxy=http://cba.proxy.prismaaccess.com:8080"
alias EDSProxyOn="export {all,http,https}_proxy=http://proxy.au.eds.com:8080"
alias ProxyOff="unset {all,http,https}_proxy"
```

More info on proxies: CLI - Why you should not set CNTLM nor Prisma Proxy and SSL Certificate issues

Troubleshooting:

- Say alpaca doesn't work, or you just don't want it anymore:

```
brew service stop alpaca
brew uninstall alpaca
```

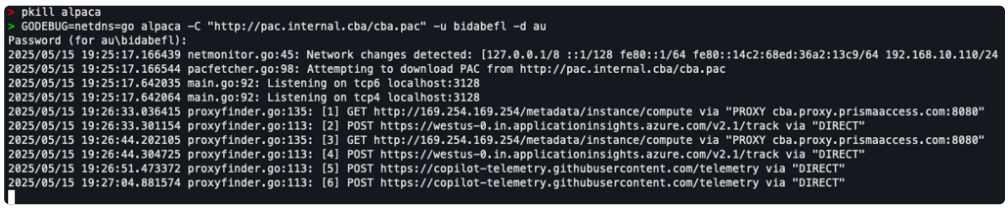
revert the changes in your ~./zshrc and point `{all,http,https}_proxy` to CNTLM or prisma (cba.proxy.prismaaccess.com:8080)
Understand, this is not ideal because you then no longer make use of the PAC file, so you need to manually set the `no_proxy` variable for your CLI to know when to go throught the corporate proxy and when not to...

- If you do not want a persistent proxy set, you can comment line 3 in Step 4: `export {all,http,https}_proxy=http://localhost:3128` so you can invoke it manually.

- If you want an interactive session to see what's happening but the daemon is running, you can

stop it gracefully: `launchctl unload ~/Library/LaunchAgents/homebrew.mxcl.alpaca.plist`

or kill it: `pkill alpaca` and run it manually.



On Windows

> Same as above roughtly...

1. Download the Windows binary at: Releases · samuong/alpaca
2. Store it in the Dev folder to bypass Application whitelisting
3. Then run it with `./alpaca.exe`
   a. If it does not detect the PAC URL, run it with `./alpaca.exe -C http://pac.internal.cba/cba.pac`
4. If it works, optionaly: make it a service, or create a background scheduled task (or play in CurrentVersion / Run in Regedit)
5. Set your Env Variables (no bash expansion here...):
   `all_proxy=http://localhost:3128`
   `http_proxy=http://localhost:3128`
   `https_proxy=http://localhost:3128`

Configure Proxy within VS Code

1. **Open VS Code**: Launch your Visual Studio Code application.
2. **Access Settings**: Go to the bottom left and click the cog icon, then click **Settings**.
3. **Search for Proxy Settings**: In the search bar at the top of the Settings UI, type `proxy`.
4. **Update HTTP Proxy**:

- Look for the setting labeled **HTTP: Proxy**.
- Enter `http://localhost:3128` in the input field.

5. **Save Changes**: Your changes should be saved automatically. You can close the Settings UI.
6. **Restart VS Code**: To ensure the new proxy settings take effect, restart Visual Studio Code.

Now your VS Code should be configured to use `http://localhost:3128` as the proxy.

Step 3: Test your extensions work

1. If you have the Snyk Extension installed, try and run a scan via the extension, you should receive results from your Snyk scan.
2. If you have GitHub Copliot installed, try and type a sample chat message and you should receive a response.

Further Information

Available Guides

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- Snyk - General Availability Info
- 🥸 Snyk - Cheat Sheet
- 📑 Snyk - Onboarding & Access Guides
- 📒 Snyk - General Guides
- 🩹 Snyk - Findings Management & Remediation
- 🏭 Snyk - Pipeline Scanning Guides
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