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Starting and Stopping Background Services with Homebrew

Gabe Berke-Williams – January 21, 2014 UPDATED ON June 1, 2016
OSX

I love [Homebrew](#), but sometimes it really gets me down, you know? Especially when I have to deal with `launchctl`.

`launchctl` loads and unloads services that start at login. In OS X, these services are represented by files ending with `.plist` (which stands for “property list”). These plists are usually stored in either `~/Library/LaunchAgents` or `/Library/LaunchAgents`. You load them (i.e. tell them to start at login) with `launchctl load $PATH_TO_LIST` and unload them with `launchctl unload $PATH_TO_LIST`. Loading a plist tells the program it represents (e.g. `redis`) to start at login, while unloading it tells the program not to start at login.

This post-install message from Homebrew may look familiar:

```
To have launchd start mysql at login:
  ln -sfv /usr/local/opt/mysql/*.plist ~/Library/LaunchAgents
Then to load mysql now:
  launchctl load ~/Library/LaunchAgents/homebrew.mxcl.mysql.plist
Or, if you don't want/need launchctl, you can just run:
  mysql.server start
```

Doing all that takes too long, and I can never remember where Homebrew plists are. Fortunately, Homebrew includes a lovely interface for managing this without using `ln`, `launchctl` or knowing where plists are.

brew services

First, install `brew services` by tapping `homebrew/services` (one time):

```
brew tap homebrew/services
```

Here's an example usage:

```
$ brew services start mysql
==> Successfully started `mysql` (label: homebrew.mxcl.mysql)
```

Behind the scenes, `brew services start` is doing everything in the post-install message above. First it runs `ln -sfv ...` for you. Then it runs `launchctl load ~/Library/LaunchAgents/homebrew.mxcl.mysql.plist`. It Just Works.

Let's say MySQL's acting funky. We can easily restart it:

```
brew services restart mysql
Stopping `mysql`... (might take a while)
==> Successfully stopped `mysql` (label: homebrew.mxcl.mysql)
==> Successfully started `mysql` (label: homebrew.mxcl.mysql)
```

Now let's see everything we've loaded:

```
$ brew services list
redis      started      442 /Users/gabe/Library/LaunchAgents/homebrew.i
postgres  started      443 /Users/gabe/Library/LaunchAgents/homebrew.i
mongodb    started      444 /Users/gabe/Library/LaunchAgents/homebrew.i
```

```
memcached  started      445  /Users/gabe/Library/LaunchAgents/homebrew.i
mysql      started      87538 /Users/gabe/Library/LaunchAgents/homebrew.i
```

Note that the list of services includes services you started with `launchctl load`, not just services you loaded with `brew services`.

Let's say we uninstalled MySQL and Homebrew didn't remove the plist for some reason (it usually removes it for you). There's a command for you:

```
$ brew services cleanup
Removing unused plist /Users/gabe/Library/LaunchAgents/homebrew.mxcl.m
```

Kachow.

Hidden Homebrew commands

Homebrew ships with a whole bunch of commands that don't show up in `brew --help`.

You can see a list of them in [the Homebrew git repo](#). Each file is named like

`brew-COMMAND`, and you run them with `brew command`. I recommend `brew beer`.

What's next

If you liked this, I recommend reading through Homebrew's [Tips and Tricks](#). You can also try out another Homebrew extension for installing Mac apps: [homebrew-cask](#).

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