

Mac Hacking

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Chapter 1

Foreword

The OS for demo in this book is of macOS Sierra, Version 10.12.6.

Chapter 2

Awesome Softwares

2.1 Packages Manager

- [Homebrew 1.3.6](#)
- [Homebrew-Cask 1.3.6](#)

2.2 Homebrew

2.2.1 Sources update

Mechanism

The sources for updating in Homebrew consists of

- brew.git: basic component
- homebrew-core.git: core component
- homebrew-bottles: pre-compiled binary packages

If we want to fully update the source for updating of Homebrew, all of the three components should be replaced with sources available and faster to us.

Customize sources

The default sources for Homebrew is hosted in Github, making them not so friendly for users in some regions. Take me as an example. I'm a Chinese, and it's usually faster for me to fetch resources from our mainland than Github. Hence, domestic sources is preferred to me.

To customize sources for Homebrew to suit our need, we can update the remote repository "origin" for the 3 components to those hosted in, says Tsinghua university, as follows.

```
1 # switch the installation directory of Homebrew
2 $ cd "$(brew --repo)"
3 # update the remote repository ``origin`` for the basic component to that of
  Tsinghua
4 $ git remote set-url origin https://mirrors.tuna.tsinghua.edu.cn/git/homebrew/brew.
  git
5
6 # switch the installation directory of homebrew-core
7 $ cd "$(brew --repo)/Library/Taps/homebrew/homebrew-core"
8 # update the remote repository ``origin`` for the core component to that of Tsinghua
9 $ git remote set-url origin https://mirrors.tuna.tsinghua.edu.cn/git/homebrew/
  homebrew-core.git
10
11 # replace the domain in .bash_profile for homebrew-bottles by that of Tsinghua
12 $ echo 'export HOMEBREW_BOTTLE_DOMAIN=https://mirrors.tuna.tsinghua.edu.cn/homebrew-
  bottles' >> ~/.bash_profile
13
14 # refresh the .bash_profile to make it effective
15 $ source ~/.bash_profile
```

```
16  
17 # don't forget to apply the update  
18 $ brew update
```

Reset to default sources

```
1 # switch the installation directory of Homebrew  
2 $ cd "$(brew --repo)"  
3 # reset the upstream repository ``origin`` for the basic component  
4 $ git remote set-url origin https://github.com/Homebrew/brew.git  
5  
6 # switch the installation directory of homebrew-core  
7 $ cd "$(brew --repo)/Library/Taps/homebrew/homebrew-core"  
8 # reset the remote repository ``origin`` for the core component  
9 $ git remote set-url origin https://github.com/Homebrew/homebrew-core.git  
10  
11 # to reset the domain for homebrew-bottle, just remove the customized one from .  
12   bash_profile  
13  
14 # don't forget to apply the update  
15 $ brew update
```

2.3 Homebrew-Cask

2.3.1 Customize sources

For the similar reason to that of Homebrew, we can update the sources for updating in Homebrew-Cask to a domestic one (says, the one hosted by USTC) by commands specified as Listing 2.1.

Listing 2.1: Customize sources for Homebrew-Cask

```
1 # switch to the local repository of Homebrew-Cask  
2 cd "$(brew --repo)/Library/Taps/caskroom/homebrew-cask  
3 # update its upstream  
4 git remote set-url origin https://mirrors.ustc.edu.cn/homebrew-cask.git
```