

Installing Software in \$HOME/local

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Have you ever found yourself in this position? Your sysadmin is awesome. Your sysadmin is also busy and does not install software in a timely fashion. You could install what you need in easily if only you had root privileges.

The truth is that most software does not require root privileges to run. Root privileges are only needed to install the software in sensitive directories. There is generally no reason why a local user install will not work.

This post will cover installing software in **\$HOME/local**. Specifically, the **keychain** utility will be built from source and manually installed. Root privileges are specifically not required.

Software Versions

```
$ date -u "+%Y-%m-%d %H:%M:%S +0000"
```

```
2016-03-17 17:49:50 +0000
```

```
$ uname -vm
```

```
FreeBSD 11.0-CURRENT #0 r296925: Wed Mar 16 20:53:04 JST 2016      root@mirage.sennue.com:/usr/o
```

Instructions

First, create **\$HOME/local**.

```
mkdir -p $HOME/local/bin
mkdir -p $HOME/local/lib
mkdir -p $HOME/local/share
```

Add *HOME/local/bin* ****toyourpathin******\$HOME/.profile**. If you are not using **sh**, this line may belong in another file. Adding *HOME/local/bin* ****before******\$PATH** is important. You probably want your local install to take precedence over a system wide installation.

.profile

```
export PATH="$HOME/local/bin:$PATH"
```

Reload **\$HOME/.profile** so changes take effect.

```
. $HOME/.profile
```

Clone the **keychain** git repository into **\$HOME/local**.

```
cd $HOME/local
git clone https://github.com/funtoo/keychain.git
cd keychain
```

Build and install **keychain**. So far as I can tell, **keychain** needs to be manually installed on systems that do not support RPM. Other software may have options to configure the installation directory. In any case, a manual installation is a valuable experience.

```
make
install -m0755 keychain $HOME/local/bin
mkdir -p $HOME/local/share/man/man1
install -m0644 keychain.1 $HOME/local/share/man/man1
```

The **keychain** utility and **man** page should now be available.

```
man keychain
keychain
```

Finally, consider letting your sysadmin know what you installed. A system wide install may make sense.

References:

- [Keychain Official Project Page](#)
- [Keychain Github Repository](#)
- [RPM, Creating the Spec File](#)