Tmux & Other Tools

Jake Zimmerman

October 22, 2016

Package Managers

Package managers make installing software easy

Package managers...

- let us install software from the command line.
- are usually specific to an operating system.
 - ▶ macOS? → brew
 - lacktriangle Ubuntu? ightarrow apt-get
 - ightharpoonup Arch? ightharpoonup pacman
- usually ship along side the operating system.
 - exception: brew on macOS needs to be installed separately

Using your package manager¹

Package managers all have different commands and syntax.

- macOS
 - First download & install: http://brew.sh
 - brew install <package>
- Ubuntu
 - sudo apt-get install <package>

For other systems, take a second to look up how to install packages using your package manager.

¹Windows users: the rest of this talk assumes macOS or Linux.

tmux

tmux is a terminal multiplexer

From Wikipedia:

tmux is a software application that can be used to "multiplex" several virtual consoles, allowing a user to access multiple separate terminal sessions inside a single terminal window or remote terminal session. It is useful for dealing with multiple programs from a command-line interface.

TL;DR:

- You can create tabs running different commands
- You can create splits (horizontally and vertically) running different commands

Launching tmux creates a "session"

Create a session

\$ tmux

```
# Create a named session
$ tmux new -s gpi

# Attach to last session you detached from
$ tmux a

# Attach to any named session you detached from
$ tmux a -t gpi
```

Note that we can "detach" from sessions. In fact, if we get

disconnected: tmux automatically detaches us!

We use tmux with a "prefix"

Nearly all tmux commands look like:

```
<prefix> is Ctrl + B by default
```

You can rebind this if you want (ex: I use Ctrl + F)

Examples:

- Ctrl + B, % → create vertical split
- Ctrl + B, " → create horizontal split
- ightharpoonup Ctrl + B, c ightharpoonup create new tab

Why use tmux, then?

- Never lose your work from a shaky network
 - Just re-login and re-attach to your session
- Split the screen
 - ▶ 80-character line length enables screen splitting
- Avoid re-typing your password
 - Creating a new tab or split doesn't require a password
- Customize tmux
 - You can choose the fastest keyboard shortcuts that work for you

tmux config & cheat sheet

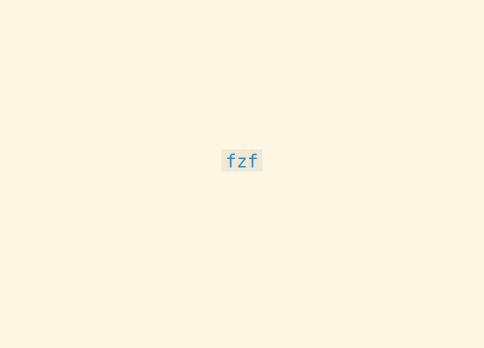
It's dangerous to go alone! Take this.

This config file makes using tmux easier to start.

► Starter tmux.conf file

This cheat sheet has everything else you want to know.

tmux shortcuts & cheatsheet



fzf is a command line fuzzy finder

- ► TL;DR: look at this awesome demo
- ► To install: https://github.com/junegunn/fzf
 - Just go ahead and answer "yes" to everything

Using fzf is crazy powerful

- Press Ctrl + T to fuzzy-find files in the current folder.
 - Type things to filter results
 - Use arrow keys to highlight result
 - Press Enter to select it
- Fuzzy-patterns let you omit characters:
 - "fzf" matches "fuzzy-find.txt"
 - "itl" matches "insert_tree_in_leaf.c"

fzf is great

- ► The previous slide is already enough to love
- But there's even more!
 - Color themes
 - Custom keybindings
 - History search
 - my-command \$(fzf)
 - ▶ It's all documented: https://github.com/junegunn/fzf
- For the adventurous: my fzf config
 - https://github.com/jez/dotfiles/blob/d540b50/ util/fzf.zsh

ag: The Silver Searcher

ag is like grep but for humans

- ag is similar to a tool called ack, but faster
- ag is recursive by default
 - avoid having to always type grep -r ...
- ag groups results by file
 - makes it easier to see where the results are from
- ag prints one line per source line
 - grep will duplicate a line if there is more than one match in it
- ag lets you search specific file types
 - ag —html —css —js will search only HTML, CSS, and JavaScript files
 - ▶ ag --cc will search only *.c and *.h file types

Installing & Learning

- Install from your package manager
 - The package isn't just called ag
 - See here for the name on your system
- Examples
 - ag foo
 - searches recursively for "foo"
 - ▶ ag --python main
 - searches recursively for "main" in Python files
- Learn more about ag
 - ▶ ag --help