Youtuber Documentation (more detailed)

1. A Quick Command Reference

• These all play off of the ctrl-b shortcut.

1. Basics

? Get help

2. Session management

- s list sessions
- \$ rename the current session
- d detach from the current session

3. Windows

- c create a new window
- rename the current window
- w list windows
- % split horizontally
- " split vertically
- n change to the next window
- p change to the previous window
- 0 to 9 select windows 0 through 9

4. Panes

- % create a horizontal pane
- " create a vertical pane
- h move to the left pane *
- j move to the pane below *
- 1 move to the right pane *
- k move to the pane above *
- q show pane numbers
- o toggle between panes

- Swap with next pane
- { swap with previous pane
- ! break the pane out of the window
 - x kill the current pane

2. TMUX

Tmux lets you keep things running persistently on servers, so you can disconnect and connect as needed without interrupting tasks that are in progress.

1. Installation

macOS:

```
brew install tmux
```

• Ubuntu Linux

```
apt install tmux
```

2. Creating a session

- If you invoke tmux by itself, you'll get dropped into a new session. And if you exit this session, you drop right back into your normal shell.
- The ctrl-b shortcut is good to memorize.

tmux

• Creating named sessions lets you reattach more easily.

```
tmux new -s session-name
```

Fig: A Raw TMUX Session

```
Terminal—tmux

daniel at thalius in ~

$ 

Output

Terminal—tmux

**Terminal—tmux

**Termin
```

3. Detaching from a session

You want a pause between the shortcut and the following command.
 To detach from a session you invoke the shortcut (ctrl-b)—followed by d, for detatch, or by typing detach explicitly.

```
ctrl+b-d

tmux detach
```

4. Show existing sessions

• You can and often will have multiple tmux sessions on a single system, so you want to be able to see what they are. You can also show sessions using the shortcut:

```
tmux 1s
```

• Fig: A view of running sessions

```
daniel at thalius in ~
$ tmux ls

0: 1 windows (created Wed Feb 6 17:57:00 2019) [70x19]
1: 1 windows (created Wed Feb 6 18:24:05 2019) [70x19]

daniel at thalius in ~
$ $ $
```

5. Attaching to an existing session

• Now that we can see those sessions, you can either connect to one by session name, or by number. The session names start at 0 and increment upwards.

```
tmux attach -t 0tmux a will connect you to the first available session.tmux attach -t session-name
```

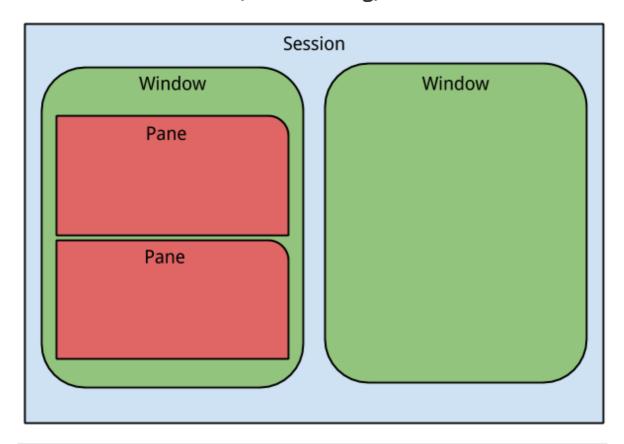
6. Killing a session

• There are times when you'll want to destroy a session outright, and that can be done similar to attaching to one.

```
$ tmux kill-session -t session-name
```

• You can also kill tmux altogether with:

7. Windows and Panes (tmux nesting)



I don't use this functionality myself.

- Another feature of tmux is the ability to break your session into more discreet components, called windows and panes. These are good for organizing multiple activities in a logical way.
- Basically, tmux sessions have windows, and windows have panes. Here's how I conceptualize the structure.
- **Sessions** are for an overall theme, such as work, or experimentation, or sysadmin.
- **Windows** are for projects within that theme. So perhaps within your experimentation session you have a window titled noderestapi, and one titled lua sample.
- **Panes** are for views within your current project. So within your sysadmin session, which has a logs window, you may have a few panes for access logs, error logs, and system logs.

8. Parting thoughts

Here are a few tips I've picked up over the years using tmux.

- Consider using *as few sessions and windows as possible*. Humans aren't as good at multitasking as we think we are, and while it feels powerful to have 47 panes open it's usually not as functional as you'd imagine.
- When you do use windows and panes, take the time to *name them*. They are indeed useful, but switching between sessions and windows is supremely annoying when they're all labeled 0, 1, and 2.
- **Start with a basic config and get used to it** before you get silly with it. I've seen multiple people spend hours configuring vim or tmux only to confuse themselves and abandon the project altogether. Start simple.

- tmux is a lot like screen, only better. The short answer for how it's better is that tmux is:
 - 1. Tmux is built to be truly *client/server*; screen emulates this behavior
 - 2. Tmux supports both emacs and vim shortcuts
 - 3. Tmux supports auto-renaming windows
 - 4. Tmux is *highly scriptable*
 - 5. Window splitting is more advanced in tmux

My Documentation

1. TMUX Window Operations

- 1. To start TMUX:
 - tmux
- 2. To create a new window:
 - hit **Ctrl+B**, then press **c**
- 3. To close a pane or window:
 - hit Ctrl+D or input exit and hit Enter
- 4. To rename a window:
 - hit Ctrl+B, then press comma(,), Enter the name of the window and press Enter
- 5. To switch window:
 - hit **Ctrl+B**, then press **p** for previous and **n** for next window
- 6. To list and select window:
 - hit **Ctrl+B**, then press **w** to list windows select desired window by scrolling **up** or **down** and press **Enter**

2. TMUX Pane Operations

- 1. To split windows vertically:
 - hit Ctrl+B, then press %
- 2. To split windows horizontally:
 - hit Ctrl+B, then press Colon(:), then enter split-window and press Enter
- 3. To close all windows:
 - Either enter **exit** or close the window by **cross button**

3. Sessions

1. To start a new session:

2. To detach from a session:

hit **Ctrl+B**, then press **D**

3. To list running sessions, enter command:

tmux list-sessions

4. To reattach to a running session, enter command:

tmux attach -t <session-name>