vim, tmux, CLI, ssh

Linden Wells, for UQCS 2022

Hi c:

I'm Linden Wells.

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Purpose of this talk

- This talk is typically annual.
- Wow you a little bit with these tools
- Teach you how to get started
- Show you some workflows (2310, quick python scripts)
- Get you to consider CLI where applicable.

Not the purpose of this talk

- You won't "know" vim by the end of this.
- Tell you to spend hours configuring your setup

ssh

secure shell is a protocol for remotely accessing a computer

Computerphile has <u>a good video</u> explaining how it works

If you're enrolled in an EAIT subject in the current semester, you should have access to "moss", a computer that you can "ssh into".

https://student.eait.uq.edu.au/infrastructure/remote-access/ssh.html

ssh - let's make sure it's installed

Windows:

Windows Terminal good.

Got moss access + reliable internet? If yes, I recommend "ssh-ing into" moss for everything.

otherwise, I recommend using Windows Subsystem for Linux (WSL).

PuTTY?

macOS/unix:

You *should* have ssh installed already.

ssh - let's connect to moss

demo:

- set up ssh key
- set up config so you can `ssh moss`
- change shell to zsh

vim - why?

- etymology: vi improved
 - 'The name "vi" is derived from the shortest unambiguous abbreviation for the ex command visual, which switches the ex line editor to its full-screen mode.' Wikipedia
- very low resource usage
- One of your only options if your only interface with a computer is via ssh.
- see demo

tmux - what's the deal?

etymology: terminal multiplexer

goal: switchable inputs with a common output

- tmux has sessions
 - sessions have windows
 - windows have panes

tmux commands

shell commands:

- tmux new-session / tmux new [-s yoursessionname]
- tmux attach-session / tmux attach / tmux a [-t yoursessionname]
- tmux Is

tmux key bindings (to be used within tmux):

- <prefix> ?
- fix> "
- prefix> %
- fix> left/right/up/down
- <prefix> c
- prefix> p
- fix> n
- fix> :

As I understand it, those key bindings are just keyboard shortcuts for the shell commands.

tmux gotchas

copying between files - just use vim :split

reading long outputs - "copy mode" is your fren

Thanks!

Pizza - make sure you have filled out the form

Minecraft server

Winners

Joshua - Anton -

Brian - Lewis -

Katrina - Tobias -

Madhav - Taylor -

Danie - Jay