INTRODUCING T^4: TIPS, TRICKS, TOOLS AND TOYS

COMPOUNDING LOTS OF SMALL CHANGES FOR LARGER EFFECTS

Dirk Eddelbuettel

T^4 Video Lightning Talk
May 3, 2020
New Series of Video Lightning Talks

- Why
- What
- How
Pretty much everything useful I ever learned about UNIX shells was not from reading books or manuals, but by peering over someone’s shoulder and seeing something I’d never seen before. “Ooooh, what was that you just did?”

Source: Joe’s awesome post on shell process substitution

https://medium.com/@joewalnes/handy-bash-feature-process-substitution-8eb6dce68133
No aims to be complete or comprehensive

- Aiming for a series of *lightning talks*
- Will try to show just one topic in each
- With maybe one or two or ... tips
- The format is not fleshed out yet
- ... but been meaning to do this for a while now
Not a “Be All, End All”

- This is meant to be *informal*
- And just like a *family style* dinner
- Maybe take some, ignore others, combine at will
Overall Spirit of a ‘Computing Bootcamp’

- A little like the famous Missing Semester of your CS at MIT
- Or my STAT 430 Data Science Programming Methods class
- *but* much reduced to minimal value-added snippets
- *assuming* you have *at least some* basis
- Because we do not plan to be as exhaustive as those
And What Not

- We are not trying to pick sides
- We are simply showing what works for us
- So yes this will be *Linux-centric* ...
- ... *but* will also work on Windows and macOS
- As one key point is *system independence*
To retire

- We aim for: *universal, portable, cross-OS, cross-Application*
- And not: OS-specific, vendor-specific, language-specific
- The idea is that a Unix-style command shell is *everywhere*:
  - your terminal app
  - your cloud console
  - your remote computer
  - your phone (yep, if you want)
What (or a little why)

In the Beginning... Was the Command Line

From Wikipedia, the free encyclopedia

In the Beginning... Was the Command Line is an essay by Neal Stephenson which was originally published online in 1999 and later made available in book form (November 1999, ISBN 978-0380815937). The essay is a commentary on why the proprietary operating systems business is unlikely to remain profitable in the future because of competition from free software. It also analyzes the corporate/collective culture of the Microsoft, Apple, and free software communities.

Contents

1 Themes
2 Later developments
3 See also
4 References
5 External links

Themes

Stephenson explores the GUI as a metaphor in terms of the increasing interposition of abstractions between humans and the actual workings of devices (in a similar manner to Zen and the Art of Motorcycle Maintenance) and explains the beauty hackers feel in good-quality tools. He does this with a car analogy. He compares four operating systems, Mac OS by Apple Computer to a luxury European car, Windows by Microsoft to a station wagon, Linux to a free tank, and BeOS is a hybrid. Stephenson argues that people continue to buy the station wagon.
Key Topics

- **Shell**, *i.e.* some little **bash** tricks
- **Tmux/Byobu**, *i.e.* to put your shell use on steroids
- **Emacs**: daemon mode and emacsclient, magic, ess, packages, …
- Maybe a little bit of **R**
- Maybe a little bit of **Docker**

So yes, we’re picking one side because, seriously, there is only one editor. But if you like another one, that’s cool too. We pick and choose.
Short and Sweet

- Similar to the R^4 videos:
  - A few slides with background material, links, ...
  - A video
  - And that’s it
- Hopefully once a week
THANK YOU!

slides  http://dirk.eddelbuettel.com/presentations/
web    http://dirk.eddelbuettel.com/
mail   dirk@eddelbuettel.com
github @eddelbuettel
twitter @eddelbuettel