### Introducing

# YULUG

by bandal

• Brief history of GNU/Linux

- Brief history of GNU/Linux
- Why use GNU/Linux

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- Why use GNU/Linux
- Getting started with GNU/Linux

# About me

### About me

Work experiences

Summer 2013 - Fall 2014:

Software Developer @ Athlete Builder Inc.

**Spring 2013:** 

Application Developer @ VONICAL Inc.

Winter 2013:

Mobile & Web Developer @ Hire Works Inc.

kelar.org/~bandali/cv.html

### About me

Work experiences

**B** sloot

languages

• Tools: Emacs, i3, Git, Zsh, Vim

• Languages: Python, Haskell, Clojure, C, Java

Which OS do you use?

• Windows

- Windows
- OS X

- Windows
- OS X
- GNU/Linux

- Windows
- OS X
- GNU/Linux
- BSD's and other unices

# Brief History of GNU/Linux

### What

 "Unix is a family of multitasking, multiuser computer operating systems that derive from the original AT&T Unix, developed in the 1970s at the Bell Labs research center by Ken Thompson, Dennis Ritchie, and others." —Wikipedia (Unix)

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• The first portable OS (entirely written in C)

• Key characteristic: Modular design

### What

### Philosophy

- "Write programs that do one thing and do it well."
- "Write programs to work together."
- "Write programs to handle text streams, because that is a universal interface."
- Douglas McIlroy (Inventor of the Unix pipeline)

What

Philosophy

License

- Some versions are proprietary
- Others are free/libre software
- Cost:
  - A \$20,000 license from Bell Labs
  - Educational license: \$150

**GNU** 

In 1983, Richard Stallman announced the GNU project, an effort to create a "free" Unix-like OS.

### **GNU**

# Software freedoms

"A program is free software if the program's users have the four essential freedoms:

- The freedom to run the program as you wish, for any purpose (freedom 0).
- The freedom to study how the program works, and change it so it does your computing as you wish (freedom 1). Access to the source code is a precondition for this.
- The freedom to redistribute copies so you can help your neighbor (freedom 2).
- The freedom to distribute copies of your modified versions to others (freedom 3). By doing this you can give the whole community a chance to benefit from your changes. Access to the source code is a precondition for this."
- -What is free software? GNU Project

# GNU/Linux

• GNU missing a working kernel

# **GNU/Linux**

- GNU missing a working kernel
- In 1991 Linus Torvalds released his hobby, the Linux kernel, as a replacement for the Minix kernel.

## GNU/Linux

- GNU missing a working kernel
- In 1991 Linus Torvalds released his hobby, the Linux kernel, as a replacement for the Minix kernel.
- Licensed under GNU GPL (General Public License)

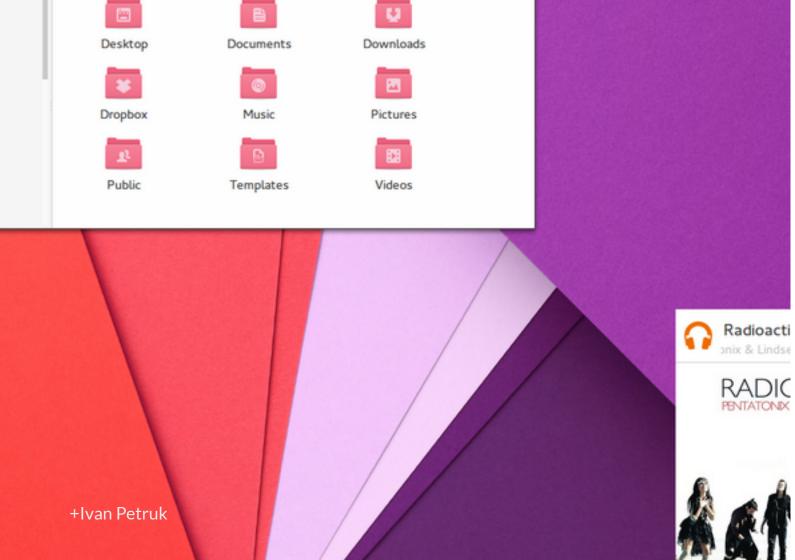
GNU + Linux = GNU/Linux

# Why Use GNU/Linux

# Freedom

# Choices

# Customizability



118,1

```
GMT] "GET /" "Mozilla/5.0 (X11; Linux x86_64; rv:34.0) Gecko/2
```

GMT] "GET /js/scripts.js" "Mozilla/5.0 (X11; Linux x86\_64; rv:

GMT] "GET /css/style.css" "Mozilla/5.0 (X11; Linux x86\_64; rv:

GMT] "GET /favicon.png" "Mozilla/5.0 (X11; Linux x86\_64; rv:34 34.0" GMT] "GET /2015/01/05/testing-css.html" "Mozilla/5.0 (X11; Lin

0100101 Firefox/34.0" GMT] "GET /ing/emptybar.jpg" "Mozilla/5.0 (X11; Linux x86\_64; ciox/34 /u/juhohei

Facebook # testing css | juhohei x



0.0.0.0:8888/2015/01/05/testing-css.html

**TESTING CSS** 

A paragraph. This paragraph has a link, turquoise in color. If you hover it, it'll be Here's some more text just to make the least three rows in length.

Second paragraph with inline code. It l turquoise color with gray background. N block of code. It should have black back white text.

function hello (name) {

```
(:require [clojure.set :as set]))
  (def board identity)
  (defn value-at [board coord]
 (get-in board coord))
11 (defn has-value? [board coord]
   (if (zero? (value-at board coord)) false true))
14 (defn row-values [board coord]
15 (let [[row _] coord]
(set (get board row))))
18 (defn col-values [board coord]
   (let [[_ col] coord]
        (value-at board [n col])))))
   (defn coord-pairs [coords]
    (for [row coords
          col coords
      [row col]))
   (defn block-coords [board coord]
    (let [[x _] coord
          [_ y] coord
            (<= 3 x 5) 3
      xrest (range x1st (+ x1st 3))
      yrest (range y1st (+ y1st 3))]
      (for [xlst xrest
            y1st yrest]
            [xlst ylst])))
```

```
el sób. 29 dic 2012
Canadian for this shit. I'm not even Canadian.
problems with mpdscribble being a shit and not
                                                      HHC.
                                                      **programming
restant x
                                                     ■archlinux
                                                      #vis
e recompilations it werked tho
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exinitre runs
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put mpdscribble in .xinitro
er mpdscribble
ido ahora como dum
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do ahora como tapt
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                                                           buffers
bnext(cr)
t wrap((cr)
ent! set paste(CR)**piset nopaste(CR)-
isual mode when I mean to "y". Use "gu" for those rare occasions.
enrik/dotfiles/blob/master/vim/config/mappings.vim
silent (muctags )/dev/null 2061 6(cr):redraw((cr)
williamsterslayer01
synIDattr(synID(line("."),col("."),0),"name") . "> lo<"
synIDattr(synIDtrans(synID(line("."),col("."),1)), "name") . ">"(CR)
```

```
haliax@polaris: >> about -haliax
blog
                             manga
lastfm
                             1-nove1
git
                             releases
mail
                             eat
vidhost
                             4chan
books
                             archlinux
walls
                             reddit
imphost
                             1cafe24
beans
unixporn
                             animebytes
dotshare
                             bitsnoop
/g/technologu
                             rutracker
nixers
                             pinatebay
haliax@polaris: >>
```

/a/ - Technologu

Start page

Getting Started with GNU/Linux

# YULUG

[https://yulug.org]