# i3 Window Manager (i3wm)

Sumner Evans

March 2, 2017

Mines Linux Users Group

Let's Talk About Window

Management

# Why do we use windows?

- Windows separate information on a screen
- Windows allow you to easily switch between tasks

Most modern OSes have workspaces as well. Workspaces refer to the grouping of windows in some window managers.  $^{1}$ 

https://en.wikipedia.org/wiki/Workspace#Graphical\_interfaces

- **Opening a window:** go to some menu somewhere, navigate through a ton of menus, click a button
- Closing a window: click the X button (or Alt + F4)
- Moving a window: find the title bar, click-and-drag
- Resizing a window: find the little thingy in the corner, click-and-drag
- Snapping a window to the side of the screen: find the title bar, drag it to the window to the side, hope that your desktop environment supports window snapping

- **Opening a window:** go to some menu somewhere, navigate through a ton of menus, click a button
- Closing a window: click the X button (or Alt + F4)
- Moving a window: find the title bar, click-and-drag
- Resizing a window: find the little thingy in the corner, click-and-drag
- Snapping a window to the side of the screen: find the title bar, drag it to the window to the side, hope that your desktop environment supports window snapping

- **Opening a window:** go to some menu somewhere, navigate through a ton of menus, click a button
- Closing a window: click the X button (or Alt + F4)
- Moving a window: find the title bar, click-and-drag
- Resizing a window: find the little thingy in the corner, click-and-drag
- Snapping a window to the side of the screen: find the title bar, drag it to the window to the side, hope that your desktop environment supports window snapping

- **Opening a window:** go to some menu somewhere, navigate through a ton of menus, click a button
- Closing a window: click the X button (or Alt + F4)
- Moving a window: find the title bar, click-and-drag
- Resizing a window: find the little thingy in the corner, click-and-drag
- Snapping a window to the side of the screen: find the title bar, drag it to the window to the side, hope that your desktop environment supports window snapping

- **Opening a window:** go to some menu somewhere, navigate through a ton of menus, click a button
- Closing a window: click the X button (or Alt + F4)
- Moving a window: find the title bar, click-and-drag
- Resizing a window: find the little thingy in the corner, click-and-drag
- Snapping a window to the side of the screen: find the title bar, drag it to the window to the side, hope that your desktop environment supports window snapping

Introducing i3wm

#### Behold: i3

```
[marcel@MacArch ~]$ scrot ~/Pictures/Screenshot%Y-%m-%d%H:%M:%S.png
        # same bindings, but for the arrow keys
        bindsym Left resize shrink width 10 px or 10 ppt
        bindsym Down resize grow height 10 px or 10 ppt
        bindsym Up resize shrink height 10 px or 10 ppt
        bindsym Right resize grow width 10 px or 10 ppt
        # back to normal: Enter or Escape
        bindsym Return mode "default"
        bindsym Escape mode "default"
bindsym $mod+r mode "resize"
# Start i3bar to display a workspace bar (plus the system information i3st
# finds out. if available)
bar {
        status_command i3status
        tray_output primary
 Modificaciones personales
                                                                                                                      marcel@MacArch
                                                                                               1000/
                                                                                                                      OS: Arch Linux
                                                                                              `+0000:
                                                                                                                      Kernel: x86_64 Linux 4.2.5-1-ARCH
# Iniciador de feh para manejar el wallpaper
                                                                                                                      Uptime: 10m
                                                                                             `+oooooo:
exec --no-startup-id feh --bg-fill ~/Pictures/archgris.jpg
                                                                                             -+000000+:
                                                                                                                      Packages: 887
                                                                                           `/:-:++0000+:
                                                                                                                      Shell: bash 4.3.42
# Shortcut para Ejecucion de programas
                                                                                          `/+++/++++++:
                                                                                                                      Resolution: 2560x1600
bindsym control+S exec --no-startup-id subl
                                                                                         \/+++++++++++++
                                                                                                                      WM: 13
bindsym control+G exec --no-startup-id gedit
                                                                                        \/+++0000000000000/\
                                                                                                                      CPU: Intel Core i5-4258U CPU @ 2.90
bindsym control+Z exec --no-startup-id zim
bindsym control+B exec --no-startup-id chromium
                                                                                                                      RAM: 582MiB / 3865MiB
bindsym control+T exec --no-startup-id terminator
# Cambio a teclado en español
exec --no-startup-id setxkbmap -layout latam
# Moverse por los workspaces con ctrl-alt-flechas
bindsym $mod+control+Right workspace next
bindsym $mod+control+Left workspace prev
                                                                             [marcel@MacArch ~1$ [
[marcel@MacArch ~]$ [
                                                                                               083% at INFINITUN066837) 192.168.1.95 E: down OHR 85.73% 00:36:55 0.00 2015-12-14 12:01:15
```

# Why i3?

#### i3 is awesome because:

- Vim bindings
- workspaces are first-class citizens
- opening terminal emulators is optimized
- highly customizable

## Using i3

- Mod + Enter: Open a terminal
- Ctrl + D: Open dmenu, a program launcher
- Mod + #: move to workspace #  $(\# \in 0, \ldots, 9)$
- Mod + Shift + #: move current window to workspace #
- Mod + H/J/K/L: make active window the one to the left/below/above/right, just like Vim.<sup>2</sup> You can also use the arrow keys.
- Mod + Shift + H/J/K/L: move window left/below/above/right
- Mod + E: activate split mode (default)
- Mod + W: activate tabbed mode
- Mod + S: activate stacked mode
- Mod + Shift + Space: float the current window

<sup>&</sup>lt;sup>2</sup>I think by default it is actually shifted one to the right but that's fixable

# Quick Live Demo

# Customizing i3

You can customize i3 editing .config/i3/config.

- Desktop Background: exec\_always feh --bg-fill <file>
- Fonts: modify font pango:<font>
- Mod Key: set \$mod Mod# (be careful or you could set it to the wrong key)
- Workspace Icons: set \$workspace1 "1: "
   results in a "1: "2"

You can customize the i3status bar by editing the .config/i3status/config.

# **Installing** i3

- Arch: pacman -S i3-wm i3status i3lock (i3lock is optional)
- Ubuntu: apt install i3
- Gentoo: good luck
- Windows or macOS/OS X: install Linux

Then add exec i3 to your ~/.xinitrc.

## **Further Reading**

- My configurations: http://www.the-evans.family/sumner/.config/
- The great i3 docs: https://i3wm.org/
- You can also check out i3-gaps AUR

# Questions?

## Copyright Notice

This presentation was from the **Mines Linux Users Group**. A mostly-complete archive of our presentations can be found online at https://lug.mines.edu.

Individual authors may have certain copyright or licensing restrictions on their presentations. Please be certain to contact the original author to obtain permission to reuse or distribute these slides.



Colorado School of Mines Linux Users Group