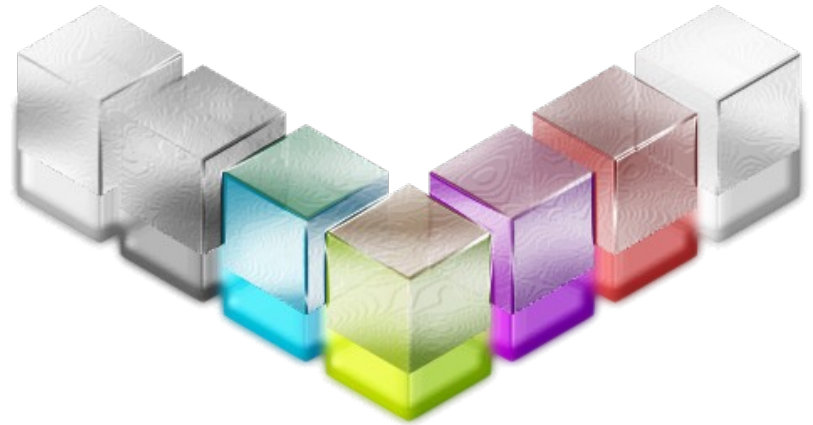


Desktop Customization

Introduction to Desktop Customization in Linux/BSD.
for Personal Educational Purpose.

Jakarta, Indonesia
11 October, 2020



About Epsi



Yet, another underachiever.
But hey, I have my own blog.

YET ANOTHER OPEN SOURCE BLOG

About This Material

After watching this, you will understand:

- 1) The difference between GUI in linux or BSD.
- 2) What customization can be done in linux or BSD.
- 3) Choices to leverage your desktop appealing.

So that you can pick [what customization suitable](#) for you for daily basis usage.

This material contain a bunch of [terminal screenshots](#).

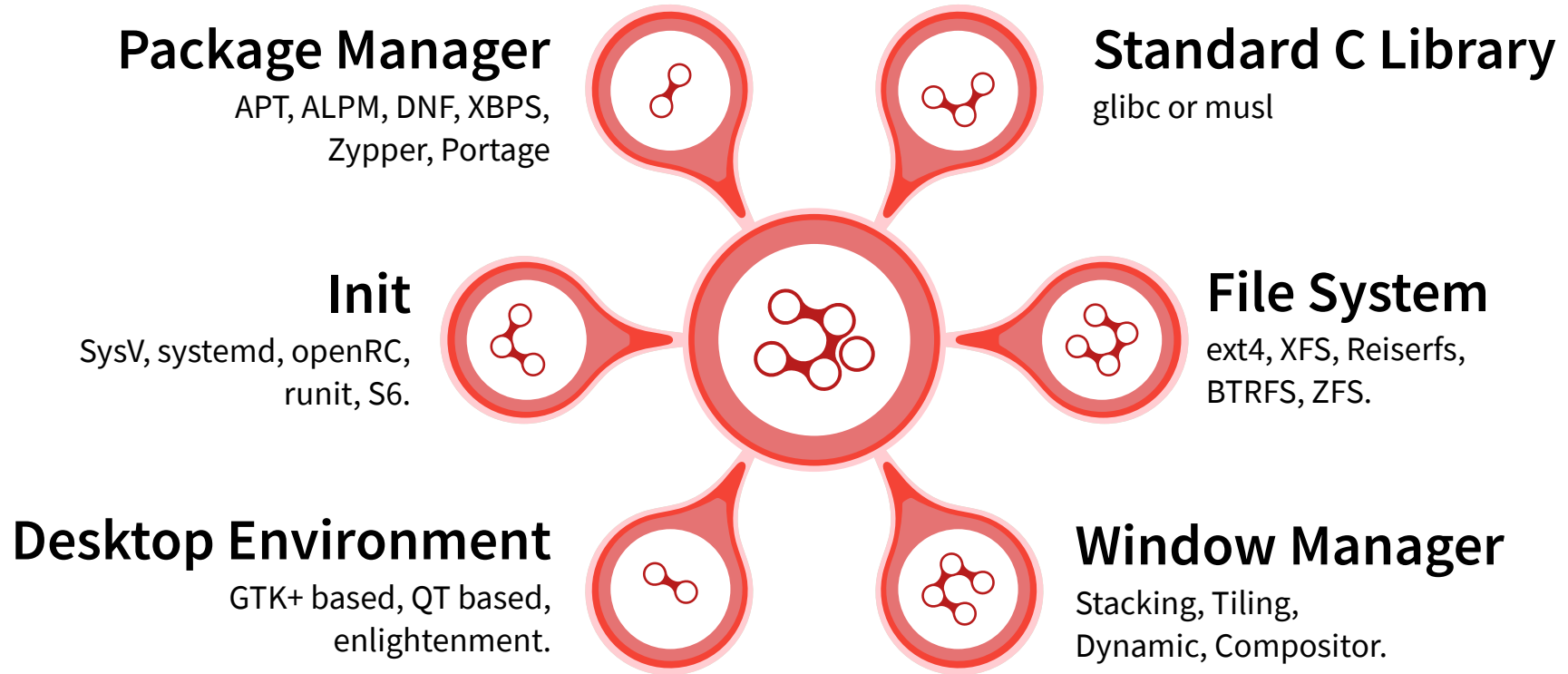
It does not mean that your daily desktop is all about terminal.

Modular Linux

Oct 11, 2020

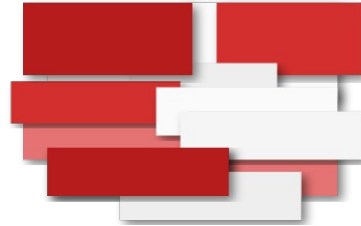
Desktop Customization
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How Modular is **Linux**?



Do not forget about kernel differences.

Reference



**Dive into Linux Subsystem
for Personal Educational Purpose.**

[[Learning Linux Diversity](#)]
Yet Another Presentation.

What Customization?

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Desktop Art



DE/WM Customization

Window manager, panel, notification and the most ingredient called wallpaper.



Terminal Customization

Shell, prompt, pixel-art, and multiplexer.

Terminal ricing along with CLI application,
are part of desktop [ricing](#).

The Difference: DE or WM?



Desktop Environment

Full Experience: Panel, File Manager, Application.



Stacking Window Manager

Stripped Down Version of Desktop Environment.

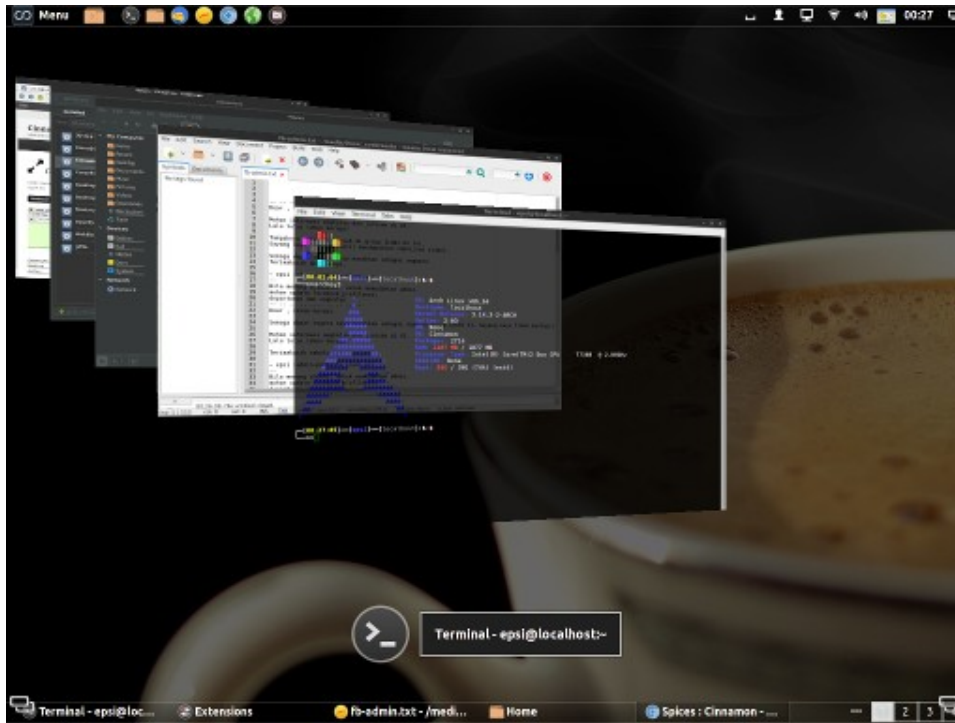


Tiling Window Manager

Non-overlapping screen real estate.

When you customize a Window Manager,
you are basically making your own Desktop Environment.

Desktop Environment Example



The good Cinnamon
(GTK+3) based.

DE/WM Categorization

GTK+ based DE

XFCE4, Gnome shell, Cinnamon, Mate, Budgie.

QT based DE

KDE Plasma, LXQT, Deepin

DE with Other Library

Enlightenment, Lumina, or such.

Compositor

KWin, Compiz.

Tiling WM (or dynamic)

AwesomeWM, XMonad, i3wm (gaps), BSPWM, HerbsluftWM, DWM, or many others.

Stacking WM

Openbox, Fluxbox.

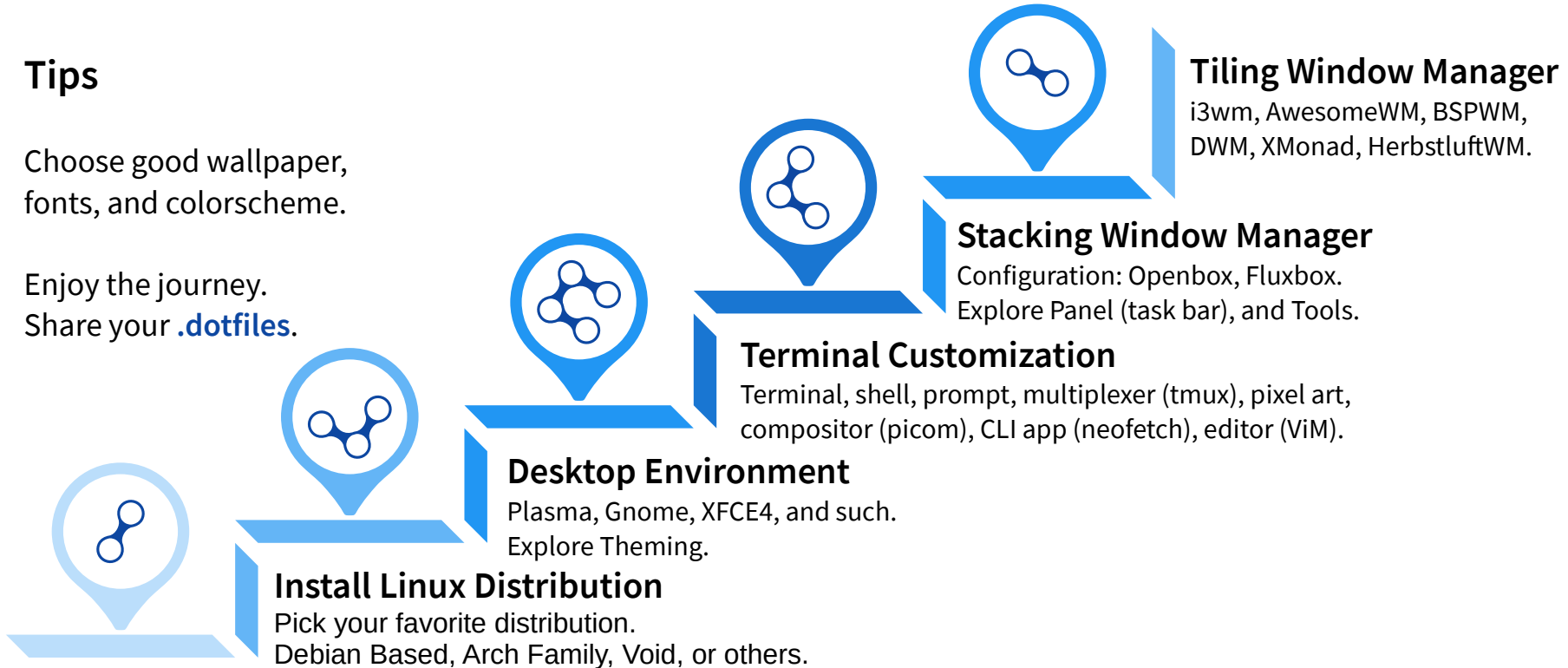
The separation is not very clear, sometimes overlapped.
[[The Difference Between DE, Shell, WM and Compositor](#)]

Desktop Customization Step by Step?

Tips

Choose good wallpaper, fonts, and colorscheme.

Enjoy the journey.
Share your [.dotfiles](#).



Learn how to google, make a screenshot (scrot), read documentation, and english.

Desktop Environment Customization

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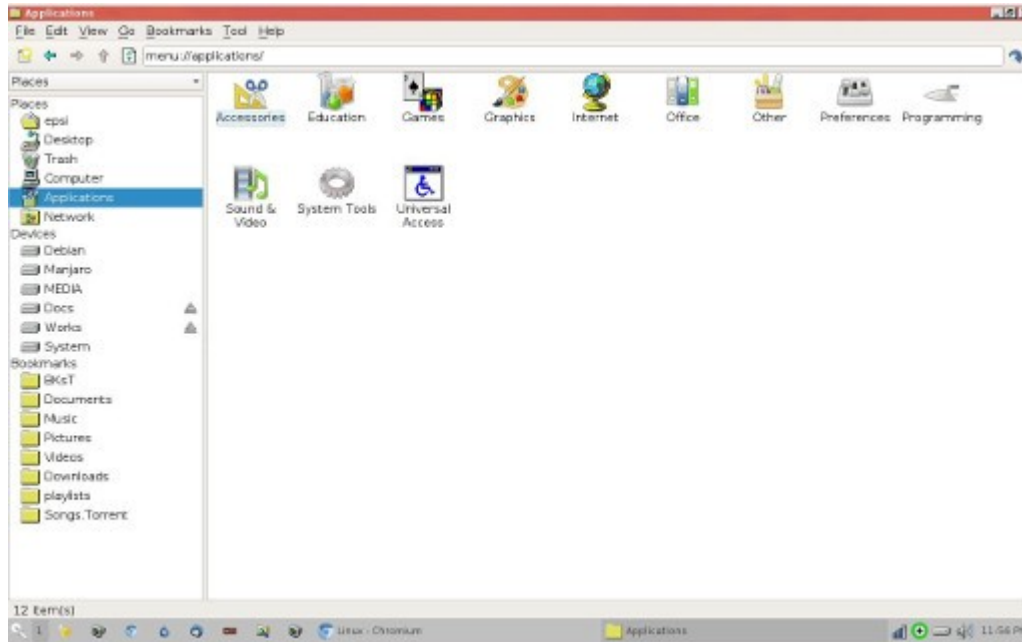
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LXQT Example

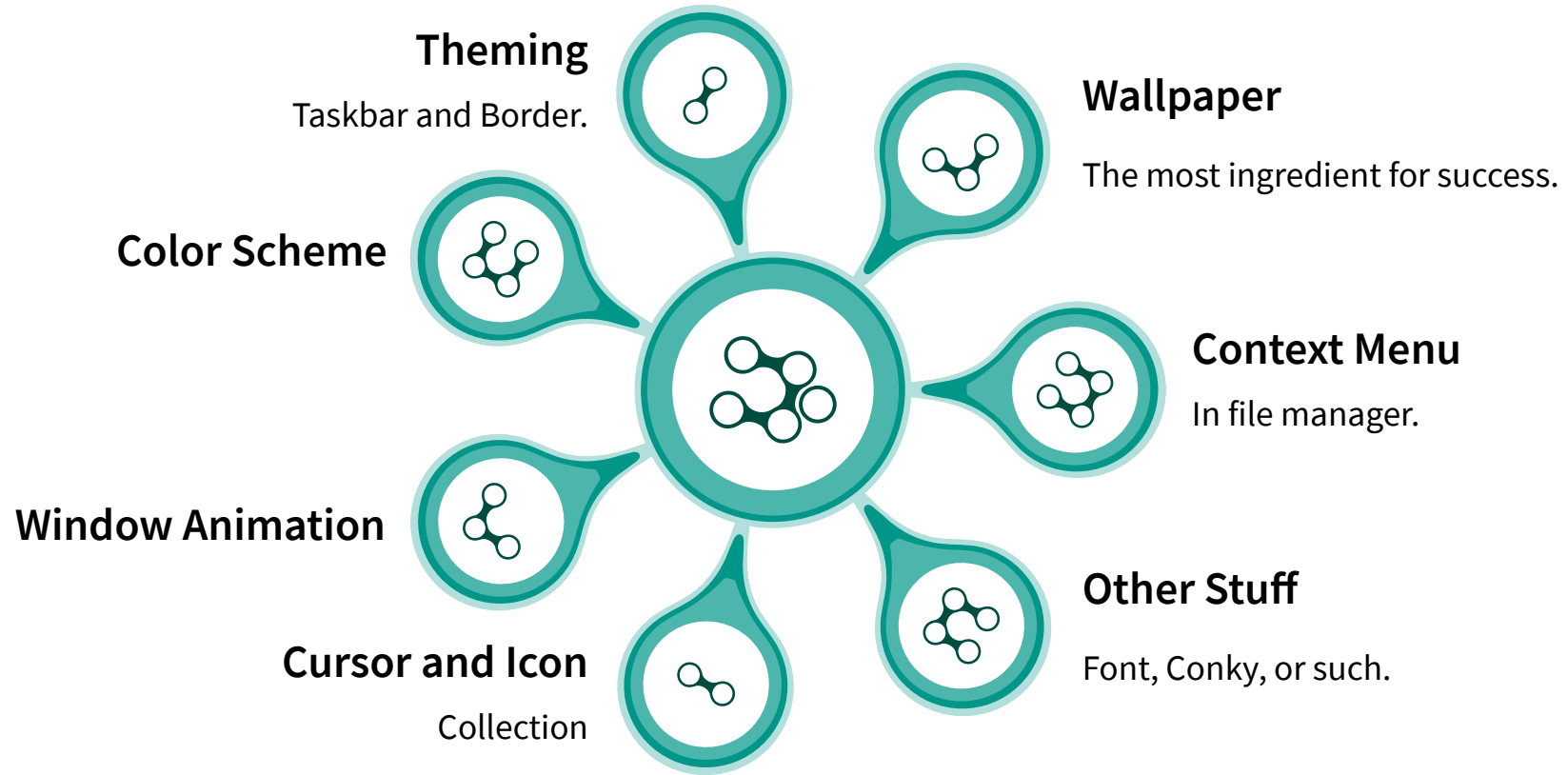
LXQT with Windowish Looks, No Kidding

[[LXQT with Windowish Looks](#)]

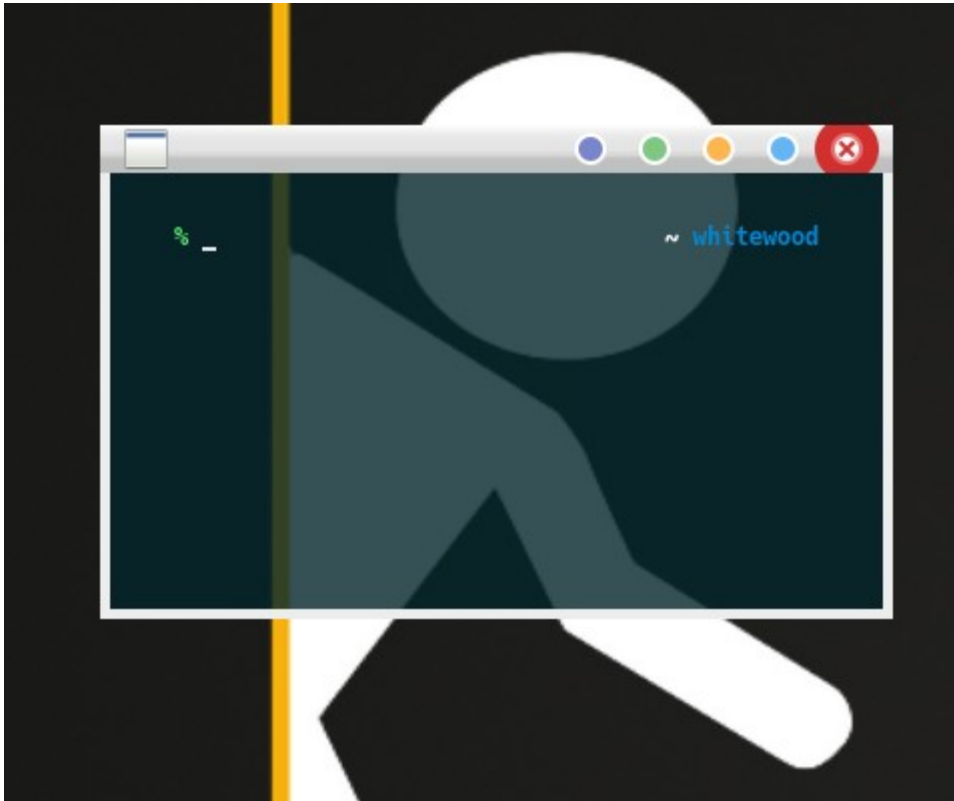
You can switch to any looks with parts from internet.



What can I do with my DE?



Example

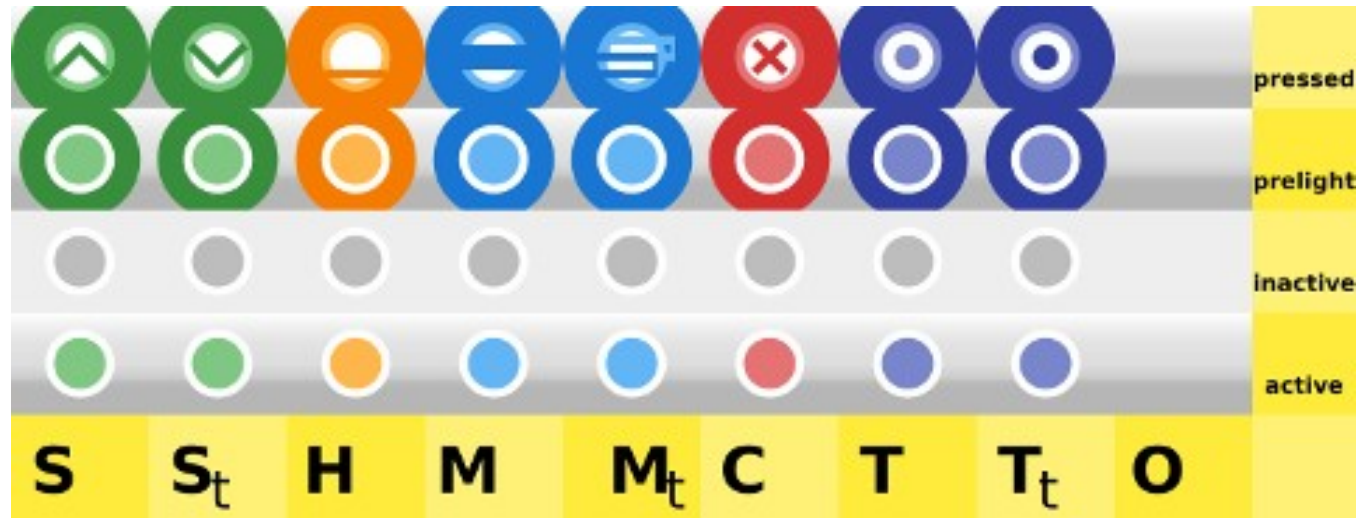


**Custom XFCE4 Theme:
PNG Gradient over XPM**

[[XFWM4 Theme - Overview](#)]

Custom XFCE4 Theme: SVG Inkscape Source

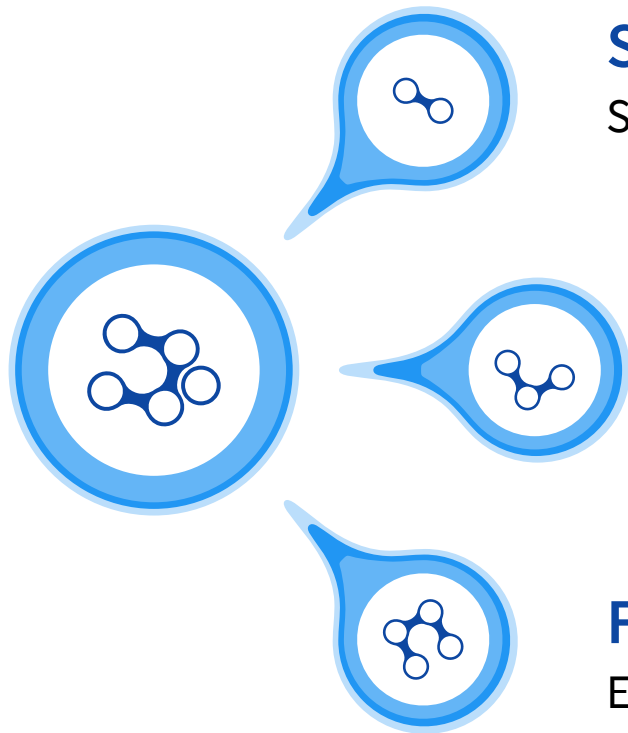
The previous window icon was designed easily using inkscape.
UI/UGM (User Interface/ Unified Graphic Material)



Window Layout

Window Layout

What **Layout**
is Available
with Your DE/WM?



Stacking

Suitable for ricing.

Tiling

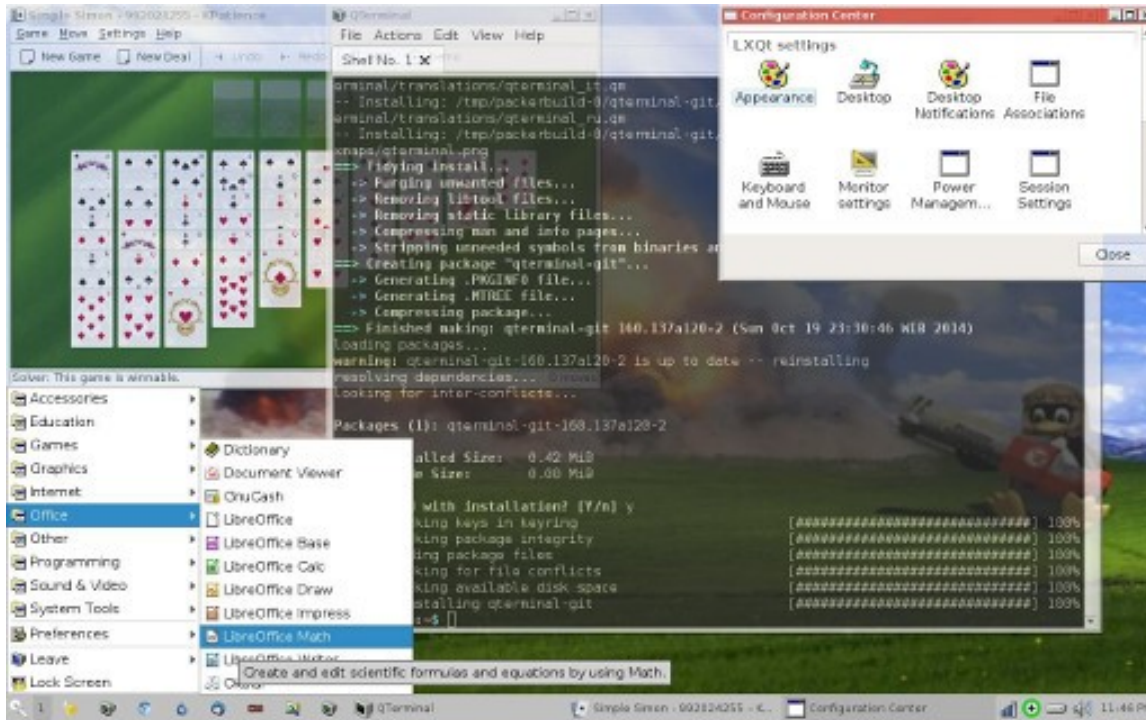
For masochist desktoper.
Avoid n00b.

Floating

Enable stacking in tiling.

[LXQT with Windowish Looks]

Stacking



Stacking Layout Example: LXQT

Tiling

```
13:30:40 Monday - ten past one
apsi 3.0.10-1 s yodart -5.001
extra/clutterlight 3.0.24-1 [installed]
GStreamer bindings for clutter
extra/gstreamer-video-effects 0.4.2-1
Collection of GStreamer effects for GNOME
extra/gst-labov 3.12.0-1 [installed]
GStreamer Multimedia Framework FFmpeg Plugin
extra/gst-plugins-bad 1.12.1-1 [installed]
GStreamer Multimedia Framework Bad Plugins
extra/gst-plugins-base 1.12.1-1 [installed]
GStreamer Multimedia Framework Base Plugins
extra/gst-plugins-base-l10n 1.12.1-1 [installed]
GStreamer Multimedia Framework Base Plugin Libraries
extra/gst-plugins-good 1.12.1-1 [installed]
GStreamer Multimedia Framework Good Plugins
extra/gst-plugins-ugly 1.12.1-1 [installed]
GStreamer Multimedia Framework Ugly Plugins
extra/gst-python 1.12.1-1
GStreamer Python 3 binding overrides
extra/gst-qt5 1.12.1-1
GStreamer Python 3 binding overrides

13:30:40 Monday - five past one
apsi 3.0.10-1 s packagelibrary -As gst
sur/av-caster 0.16.004-2 [1] 0.001
A simple native GStreamer GUI for screencast,
webcam, and audio streaming
sur/clutter-gst 20150818-1 [4] 0.001
Python application for speech recognition using
pocketsphinx and gstreamer. - latest git revision
sur/clutter-gst-gst 2.98.5.051.0000000 [1] 0.001

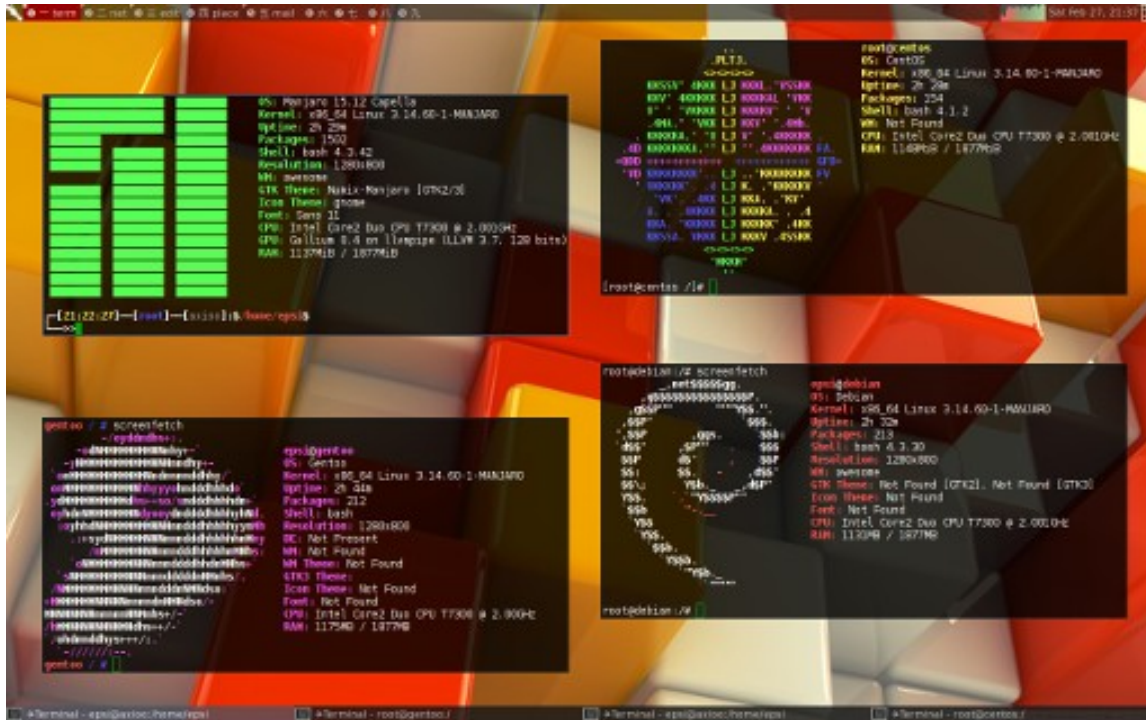
13:30:40 Monday - five to one
apsi 3.0.10-1 s packagelibrary -As gst --no-roslyn
sur/gstreamer-1.18-fluendo
0.18.35-1 (66)
GStreamer 0.18 fluendo mp3mux plugin
sur/gst-plugins-light 2.12.0-1 (44)
A light plugin version of gstreamer, inc supported
protocols without gstreamer, tcl, tk, screensaver
support, no video/voice. Includes finch
sur/gstreamer-1.18-base-plugins
0.18.36-9 (46)
GStreamer Multimedia Framework Base Plugins
(gst-plugins-base)
sur/gstreamer-1.18-base
0.18.36-9 (46)
GStreamer Multimedia Framework Base Plugin Libraries
sur/gst-plugins-good 1.12.1-1 (44)
GStreamer Multimedia Framework Good Plugins
sur/gst-plugins-ugly 1.12.1-1 (44)
GStreamer Multimedia Framework Ugly Plugins
sur/gst-python 1.12.1-1 (44)
GStreamer Python 3 binding overrides
sur/gst-qt5 1.12.1-1 (44)
GStreamer Python 3 binding overrides

13:30:40 Monday - five to one
apsi 3.0.10-1 s packagelibrary -As gst
sur/gstreamer-1.18-fluendo 0.18.35-1 (66) 0.001
GStreamer 0.18 fluendo mp3mux plugin
sur/gst-plugins-light 2.12.0-1 (44) 0.001
A light plugin version of gstreamer, inc supported
protocols without gstreamer, tcl, tk, screensaver sup
port, no video/voice. Includes finch
sur/gstreamer-1.18-base 0.18.36-9 (46) 0.001
GStreamer Multimedia Framework Base plugin Libraries
sur/gstreamer-1.18-base-plugins 0.18.36-9 (46) 0.001
GStreamer Multimedia Framework Base Plugins (gst-pl
ugins-base)
sur/gst-plugins-good 1.12.1-1 (44) 0.001
GStreamer Multimedia Framework Good Plugins
sur/gst-plugins-ugly 1.12.1-1 (44) 0.001
GStreamer Multimedia Framework Ugly Plugins
sur/gst-python 1.12.1-1 (44) 0.001
GStreamer Python 3 binding overrides
sur/gst-qt5 1.12.1-1 (44) 0.001
GStreamer Python 3 binding overrides

13:30:40 Monday - five to one
apsi 3.0.10-1 s packagelibrary -As gst
sur/av-caster 0.16.004-2 [1] 0.001
A simple native GStreamer GUI for screencast,
webcam, and audio streaming
sur/clutter-gst 20150818-1 [4] 0.001
Python application for speech recognition using
pocketsphinx and gstreamer. - latest git revision
sur/clutter-gst-gst 2.98.5.051.0000000 [1] 0.001
```

Tiling Layout Example: HerbstluftWM

Floating



Floating Layout Example: AwesomeWM

Ricing

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Ricing Guidance?

Aesthetic is First class

It is a work of art.

Technical Difficulty

Basic knowledge is a must.

Technical difficulty is appreciated.

Personal Character

Yes, there is culture.

Many factions blended in, such as dark mode, or weeb, or flat color vs transparency.

Everyone has their own personal character:

WM over DE

More customization to avoid hardcoded looks.

Ricing people prefer WM over DE.

Be creative, be different

Beautiful.

Is it **worth** it?

Socially

you need to show of,
and get some votes.

Technically

You need a good screenshot
while communicating your issue on social media,
or publishing your work in a blog or other media.

Learning

A fun case while studying OS,
and also coding.

Community

Give a fun direction for n00b that showing of
ricing screenshot can be a better life,
instead of just showing of illegal hacking.

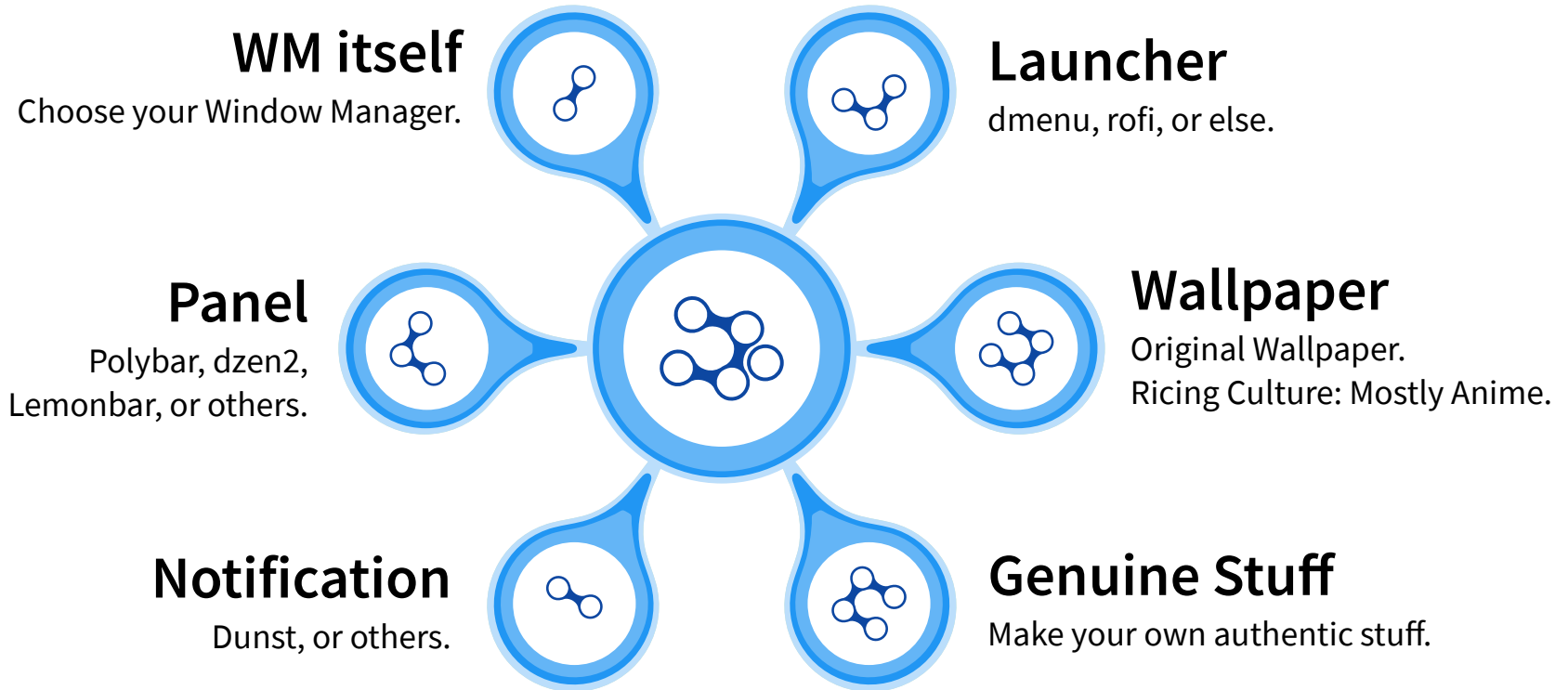
Window Manager Customization

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Window Manager Parts?

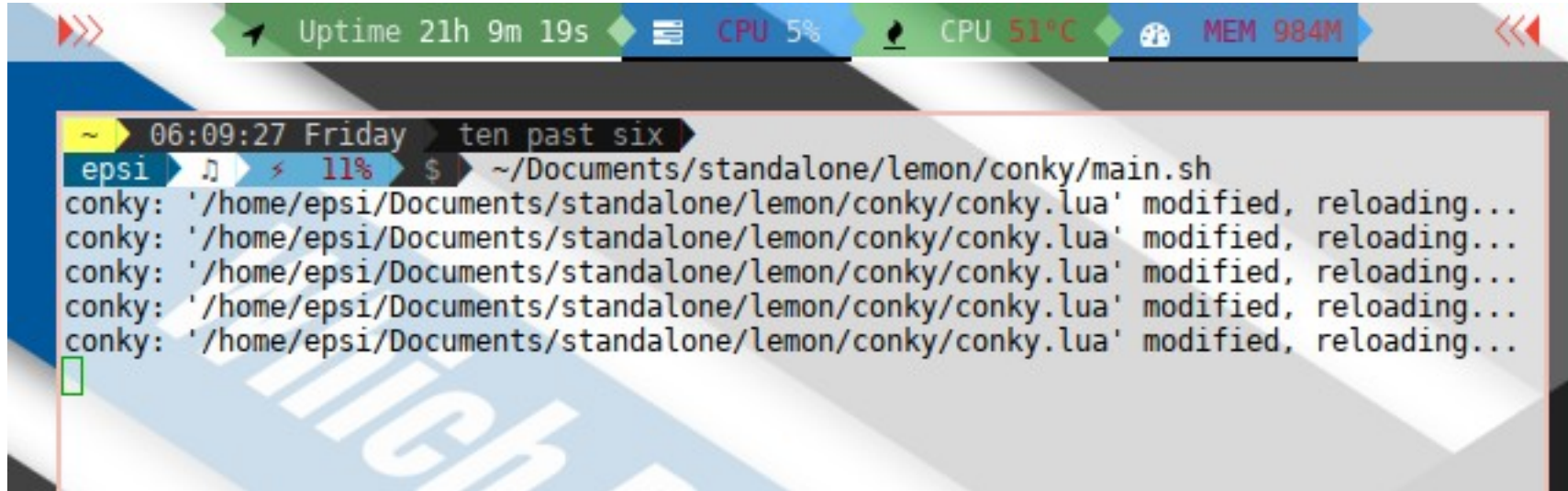


Tips: There is no wrong or right. It is all about choices.

Custom Standalone Panel

[Standalone Lemonbar Using Conky]

Example Panel



Optional Tools?

Compositor Manager

Picom or compton or xcompmgr.

Screenshooter

Scrot or others.

Wallpaper Manager

Nitrogen or feh
[Openbox Install - Common Utility]

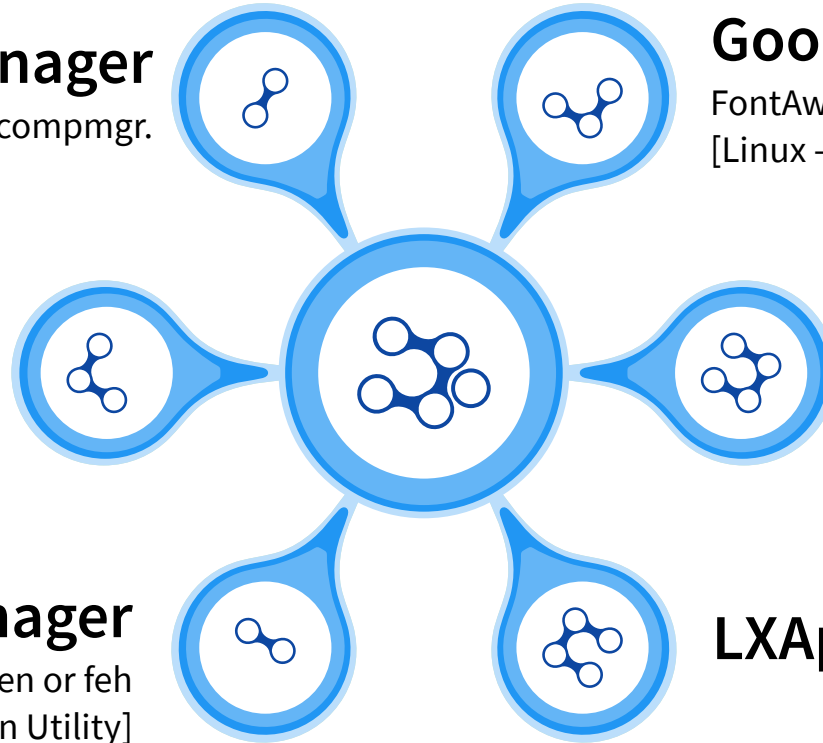
Good Font

FontAwesome, siji, terminus
[Linux - Installing Font]

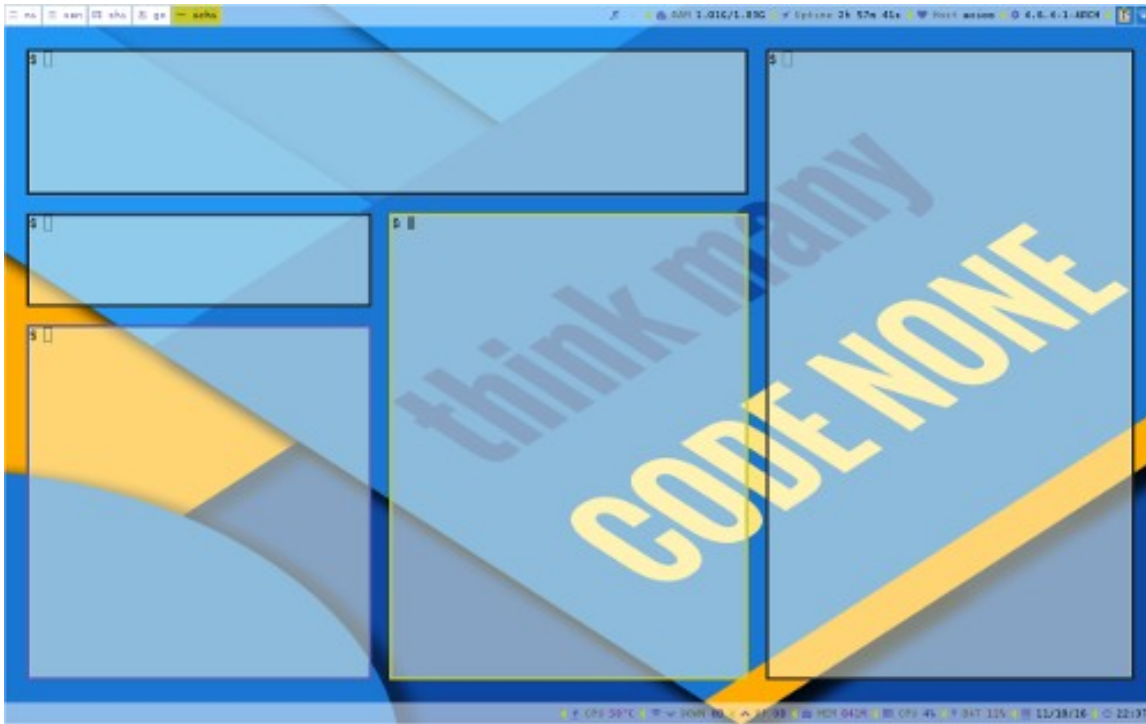
Logging Out

OB Menu or others.

LXAppearance



Wallpaper



Example: Custom Material Wallpaper

[[More Inkscape Wallpapers](#)]

[[Manjaro Logo](#)]

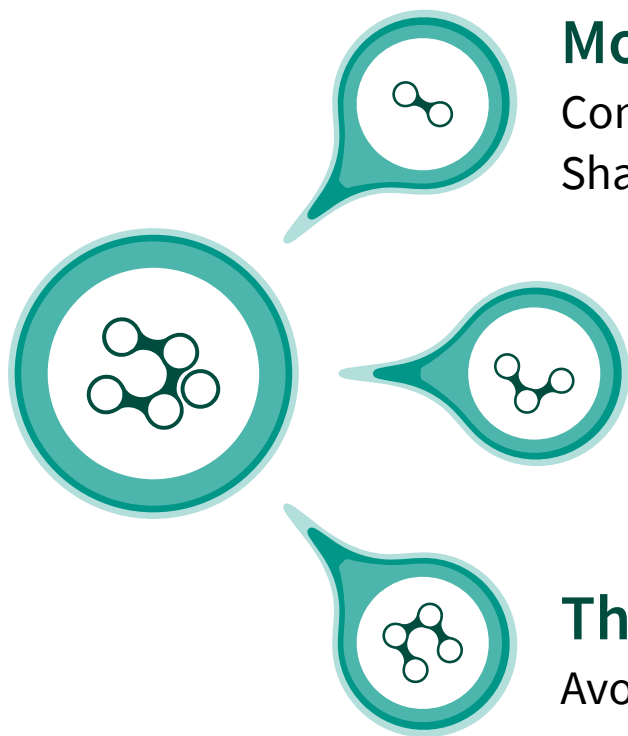
Stacking Window Manager

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Why Stacking Window Manager?



More on Customization

Configuration in Text Editor (suitable for coder),
Shareable with dotfiles

Lightweight

Small Memory Footprint.
Install only what I need.

The Looks

Avoid hardcoded looks or just be simple.

Oldschool Openbox

Example: Openbox

[Openbox Standalone]



More Articles about **Stacking** WM

[[Openbox Configuration](#)]



[[Openbox Tint2 Panel](#)]

[[Openbox Theme](#)]

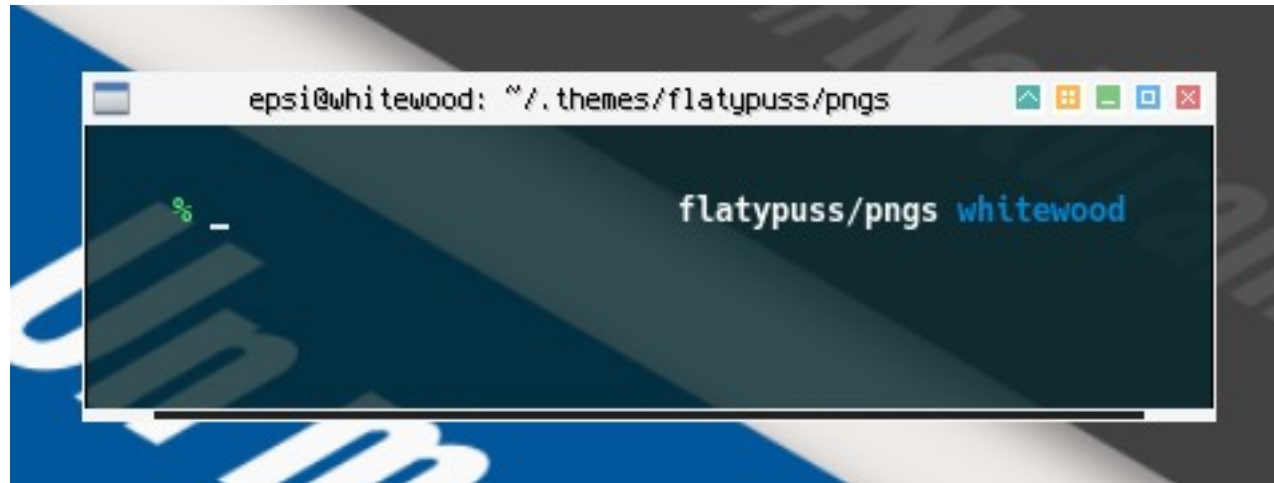


[[Fluxbox Overview](#)]

Example: Openbox Theme: Multi Color

Openbox Theme

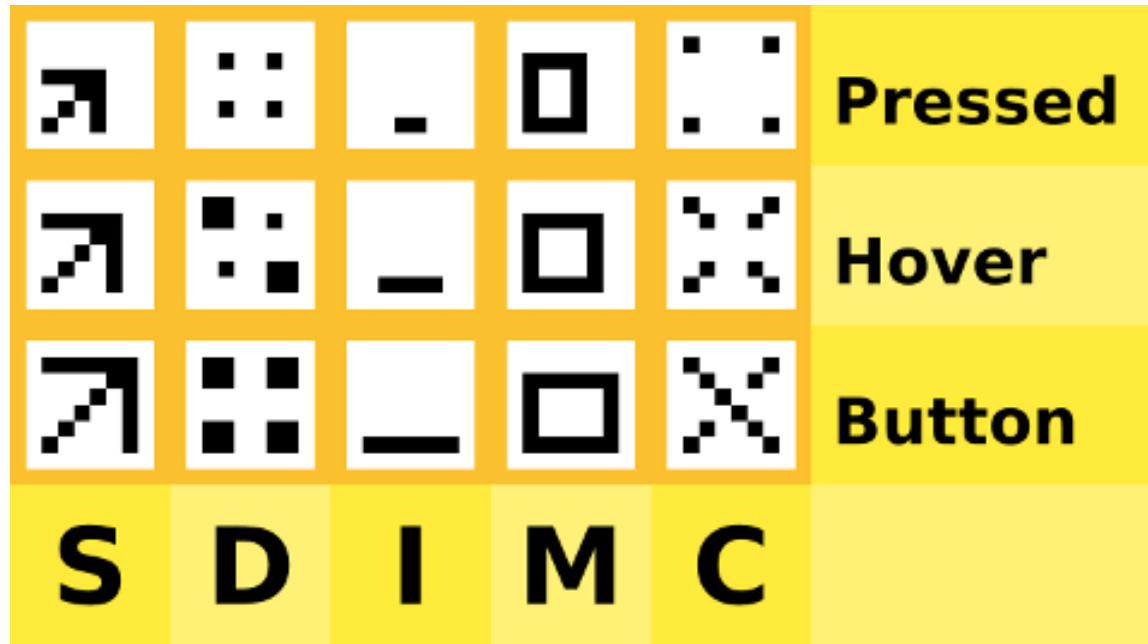
[[Openbox Theme - Special Trick](#)]



Example: Theme

[[Openbox Theming with Inkscape](#)]

UI/UGM (User Interface/ Unified Graphic Material)



Oldschool Fluxbox



Example: Fluxbox

[Fluxbox with Glowing Wallpaper]

Tiling Window Manager

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Why Tiling Window Manager?

Efficient
Non-overlapping screen real estate.

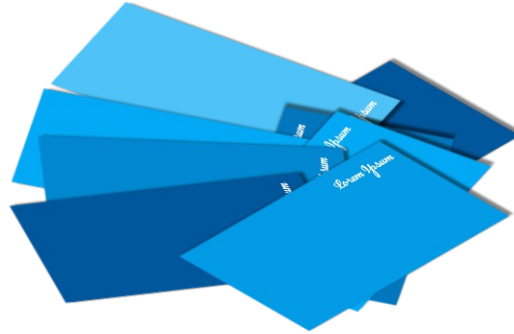
Lightweight
Compared to DE.

Customizable
Most parts can be automated.

Scaling
With Workspace or Tags.

Keyboard-driven Workflow
Most parts can be automated.

Good Watch



[[Aline Abler Presentation on Youtube](#)]

**Explained in systematic fashioned,
easy to follow, and she is pretty too.**

What **Tiling** Window Manager?

i3wm

Simple configuration, suitable for beginner.

XMonad

I can config, but weird, I still don't understand Haskell.

HerbstluftWM

Challenging technical difficulties.
The extra frame almost make me cry for happiness.

BSPWM

Tips: do not let the **blackscreen** intimidate you.

Dynamic Window Manager?

It is a kind of Tiling WM, with **presets layouts**.



Awesome WM

Easy to use for beginner, but very long config.

Built in menu, systray, notification.



DWM

First install for any minimalist distro.

You have to compile to change the behaviour.

Presets Layout (in animation)

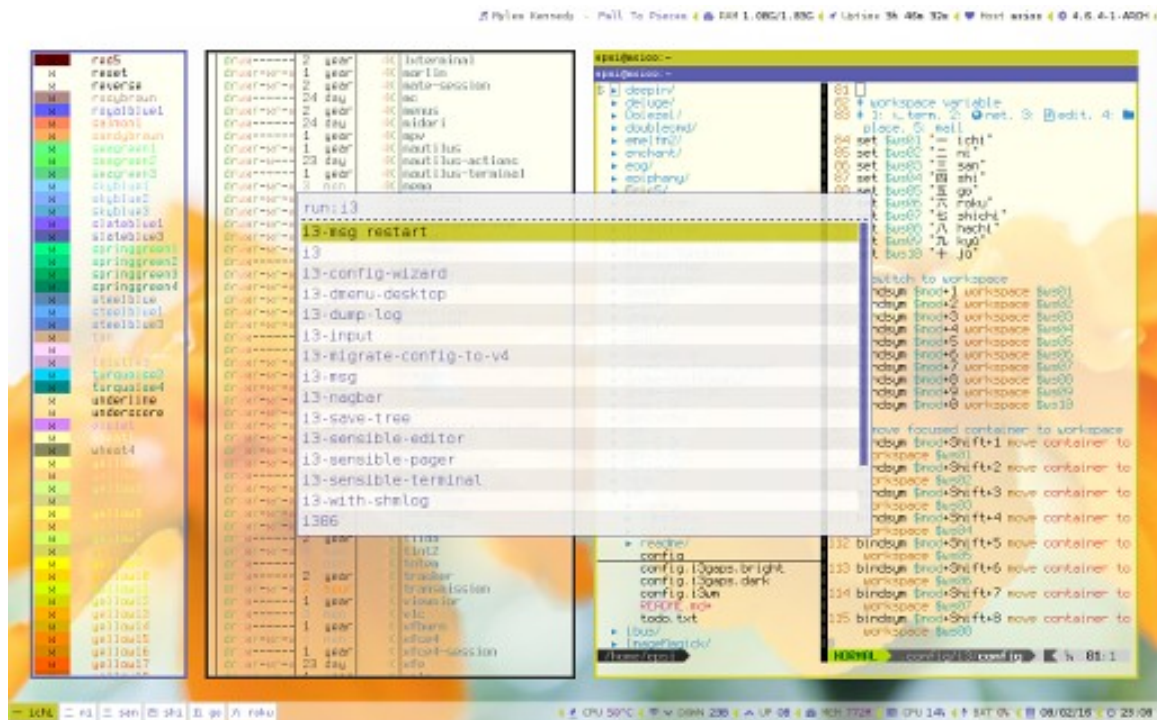


corner ne

Dynamic Window Manager

Example of presets layout:
AwesomeWM.

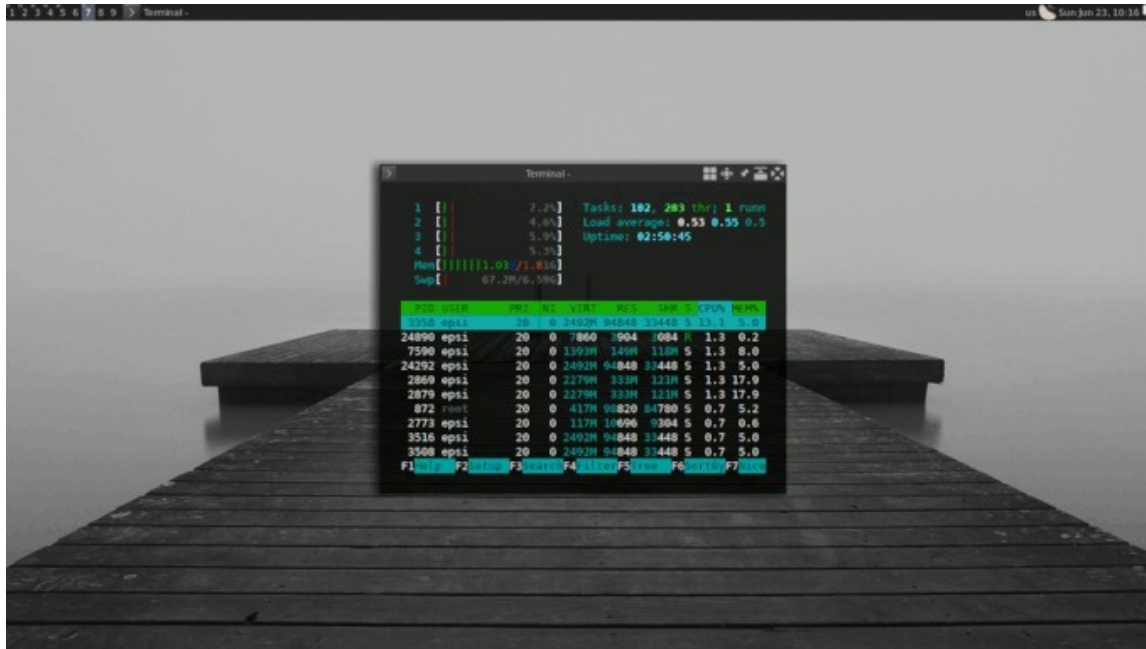
I3wm with i3status



Example: i3wm (gaps, bright)

[Modularized Conky Configuration] for i3status

AwesomeWM (in video)



Example: AwesomeWM

[Awesome WM - Binding Modules]

More about AwesomeWM

[Article: Awesome WM - Overview]



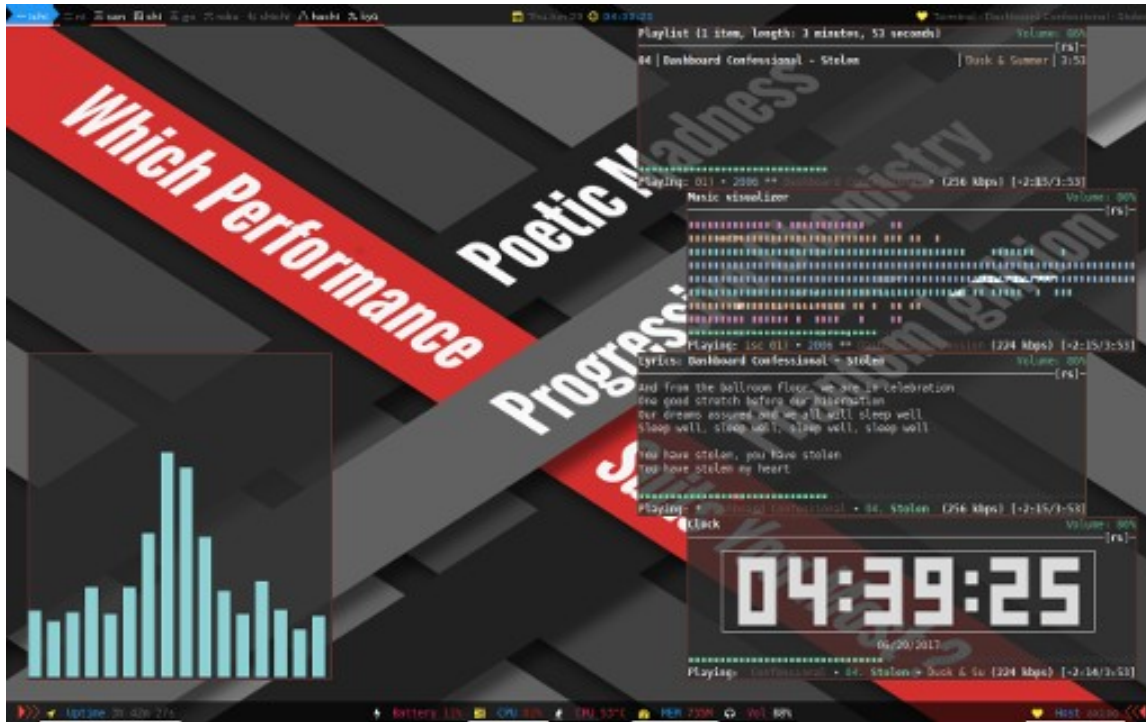
[Presentation: Awesome WM - Modularized]

[Presentation: Awesome WM - Theming]



[Presentation: Awesome WM - Statusbar]

HerbstluftWM



Example: HerbstluftWM

[HerbstluftWM in Seven Languages]

Solving HerbstluftWM Technical Difficulties

[[Modularized HerbstluftWM Overview](#)]



[[HerbstluftWM Tag Status Overview](#)]

[[HerbstluftWM Idle Event Overview](#)]



[[Summary: HerbstluftWM in Seven Languages](#)]

WM customization can be combined
with Specific Panel Bar.

Combining with Specific Panel Bar

Example: [[Dzen2 in XMonad](#)]



Other DE/WM issue

Xorg and Wayland

Terminal Customization

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Example of Terminal Ricing

[illegible]

Terminal Ricing

Main Parts

Terminal

urxvt, xfce4-terminal, termite.



Shell

bash, zsh, fish.

Prompt: powerline, oh-my-bash,
oh-my-zsh, oh-my-fish.



Multiplexer

tmux, gnu screen.
wrapper: teamocil, byobu.



Background Decoration

Wallpaper.



Additional Parts

Padding Decoration

gtk.css.



Compositor Decoration

Picom or Compton.



Example CLI

Application: neofetch, htop, cava.



Special CLI

Application: ViM Text Editor.



Pixel Art



Pixel Art

Example: Pixel Art

[ANSI Color]

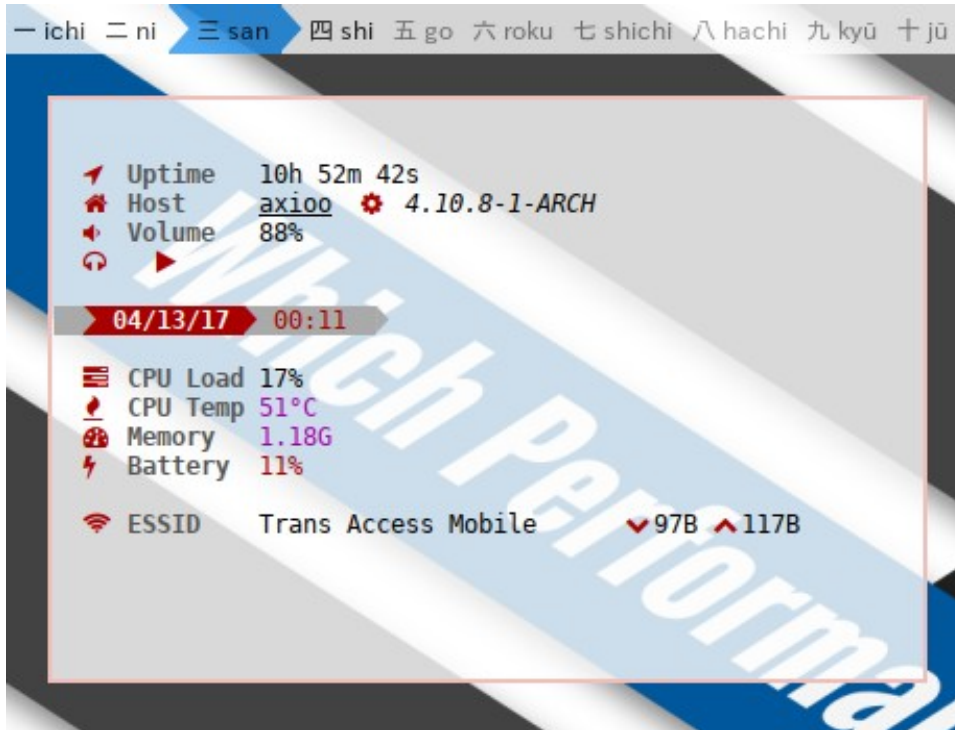


CLI /siː ɛl aɪ/


Example: Command Line Interface

[[Standalone CLI](#)]

System Monitoring Using Conky



Example: Shell Prompt



```
一 ichi 二 ni 三 san 四 shi 五 go 六 roku 七 shichi 八 hachi 九 kyū  
~ 03:57:50 Friday five to four  
epsi 11% $ docker pull crux  
Using default tag: latest  
latest: Pulling from library/crux  
a3ed95caeb02: Pull complete  
4a073de8a536: Downloading 15.11MB/122.3MB  
█
```

[[Customizing Shell Prompt with Powerline](#)]
[[Iterate Oh My BASH Theme](#)]

Dotfiles

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Where to Find Resources?

Blog

English Blog: [epsi-rns.github.io]

Local Blog: [bandithijo.github.io]

Local Guidance: [[Loonix-Newfag](#)]

dotshare.it

This is not a dead site.

[dotshare.it]

Dotfiles Examples

[gitlab.com/epsi-rns/dotfiles],

[github.com/addy-dclxvi],

[github.com/okitavera],

[github.com/myugan].

Facebook Group

Example Community:

[[Linuxer Desktop Art](#)]

Telegram Group

Example Community:

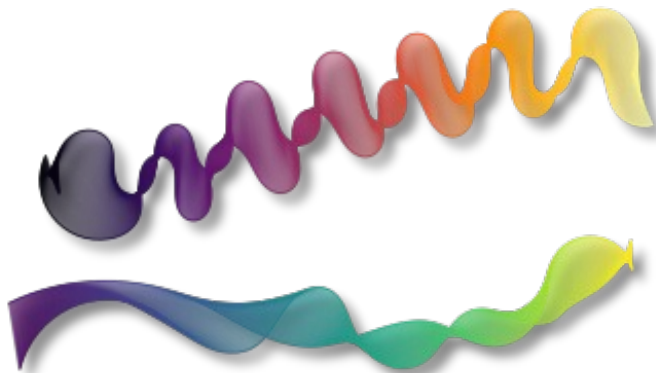
[[@dotfiles_id](#)] or,

[[@dotfiles_id_channel](#)],

[[@window_managers](#)].

Reddit

Origin of the Dotfiles Word

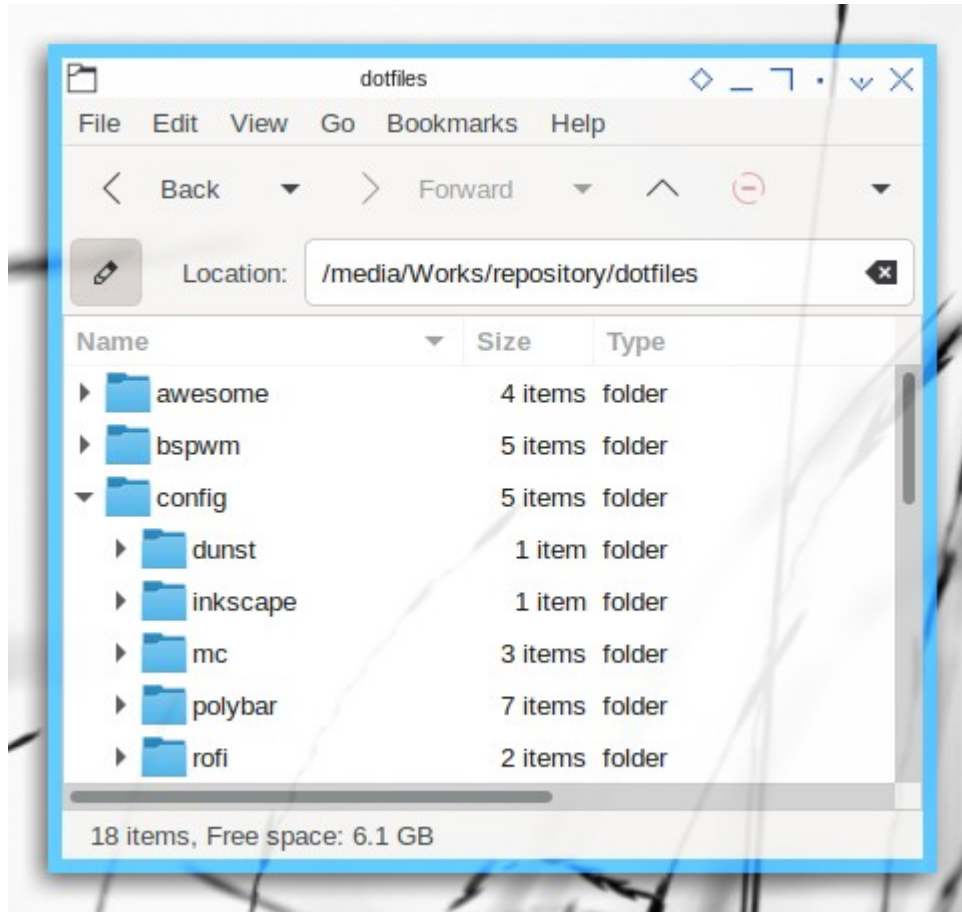


Configuration files on linux can be **shared** between hobbyist.

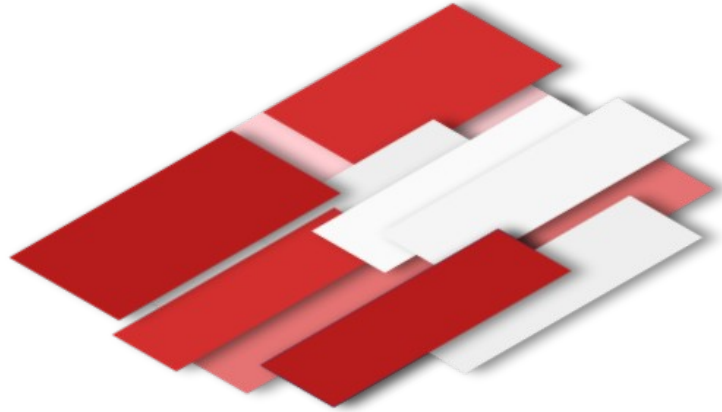
Configuration mostly lies under **.config** directory.
Or single files with name started with **dot**.

Managing Dotfiles

Sharing Resources require good folder management.

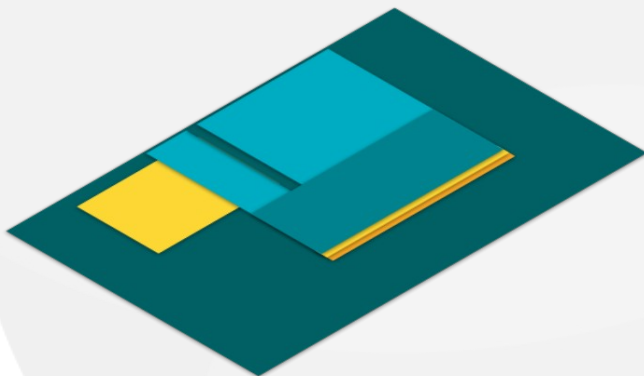


I Share Mine



[gitlab.com/epsi-rns/dotfiles]

Would you **do the same** with each other?



What is Next?

Make your own custom Statusbar Panel!
Make your own custom Window Manager!
Port old tools to a better programming language!

Leverage Coding Skills!

Questions?

Don't be shy!

The End

Thank You for Your Time.