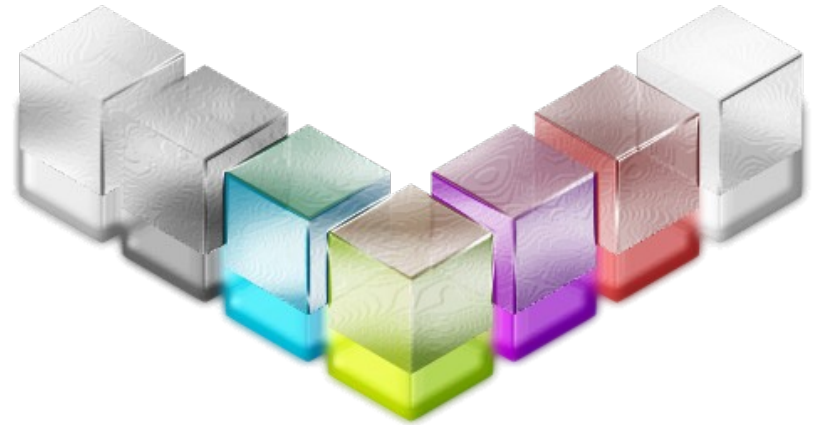


# Desktop Customization

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](#).

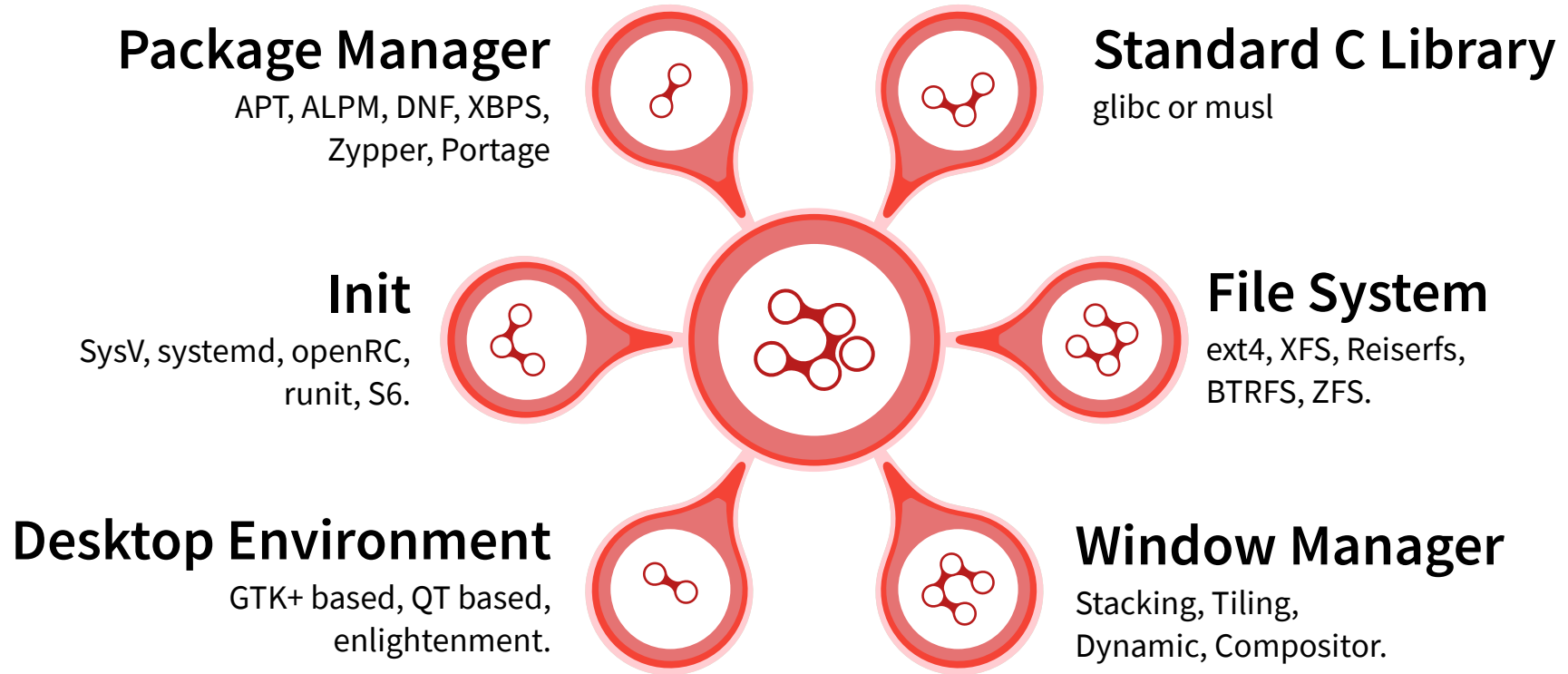
It does not mean that your daily desktop is all about terminal.

# Modular Linux

Oct 11, 2020

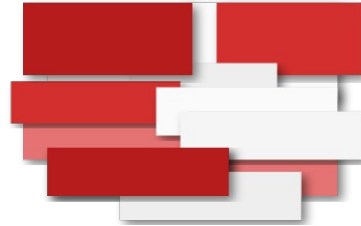
Desktop Customization  
[epsi-rns.github.io](https://epsi-rns.github.io)

# 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 Customization  
[epsi-rns.github.io](https://epsi-rns.github.io)

# 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.

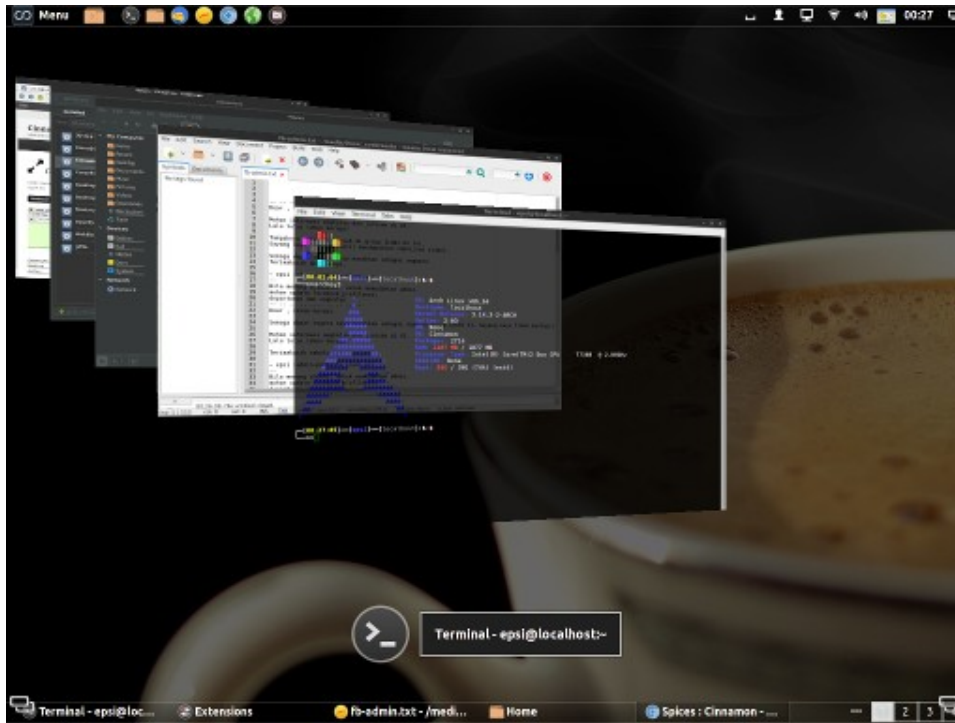


## Tiling Window Manager

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 Environment Customization

Oct 11, 2020

Desktop Customization  
[epsi-rns.github.io](https://epsi-rns.github.io)

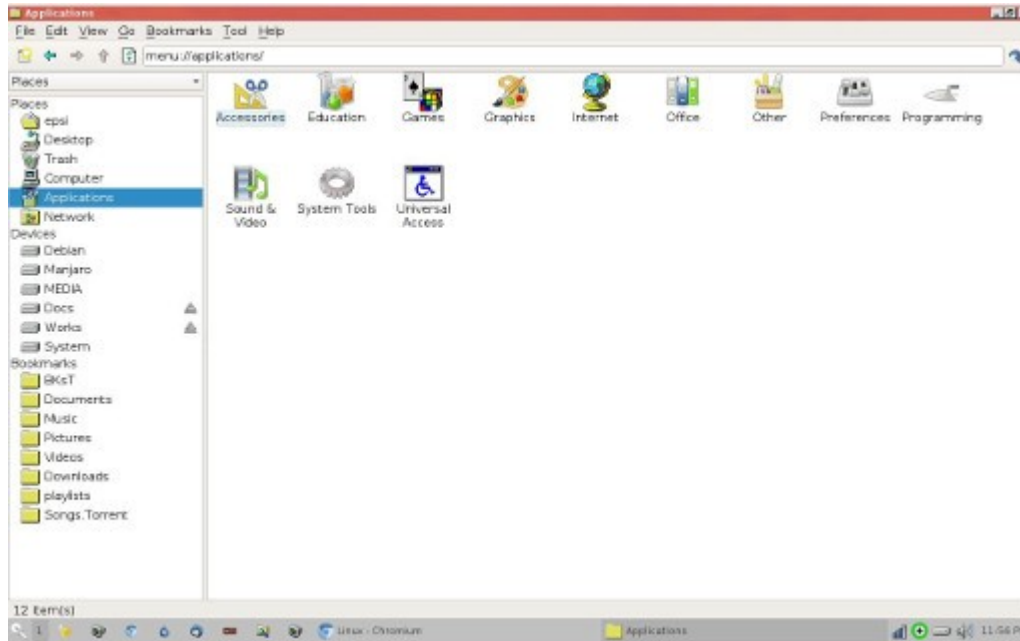
12

# LXQT Example

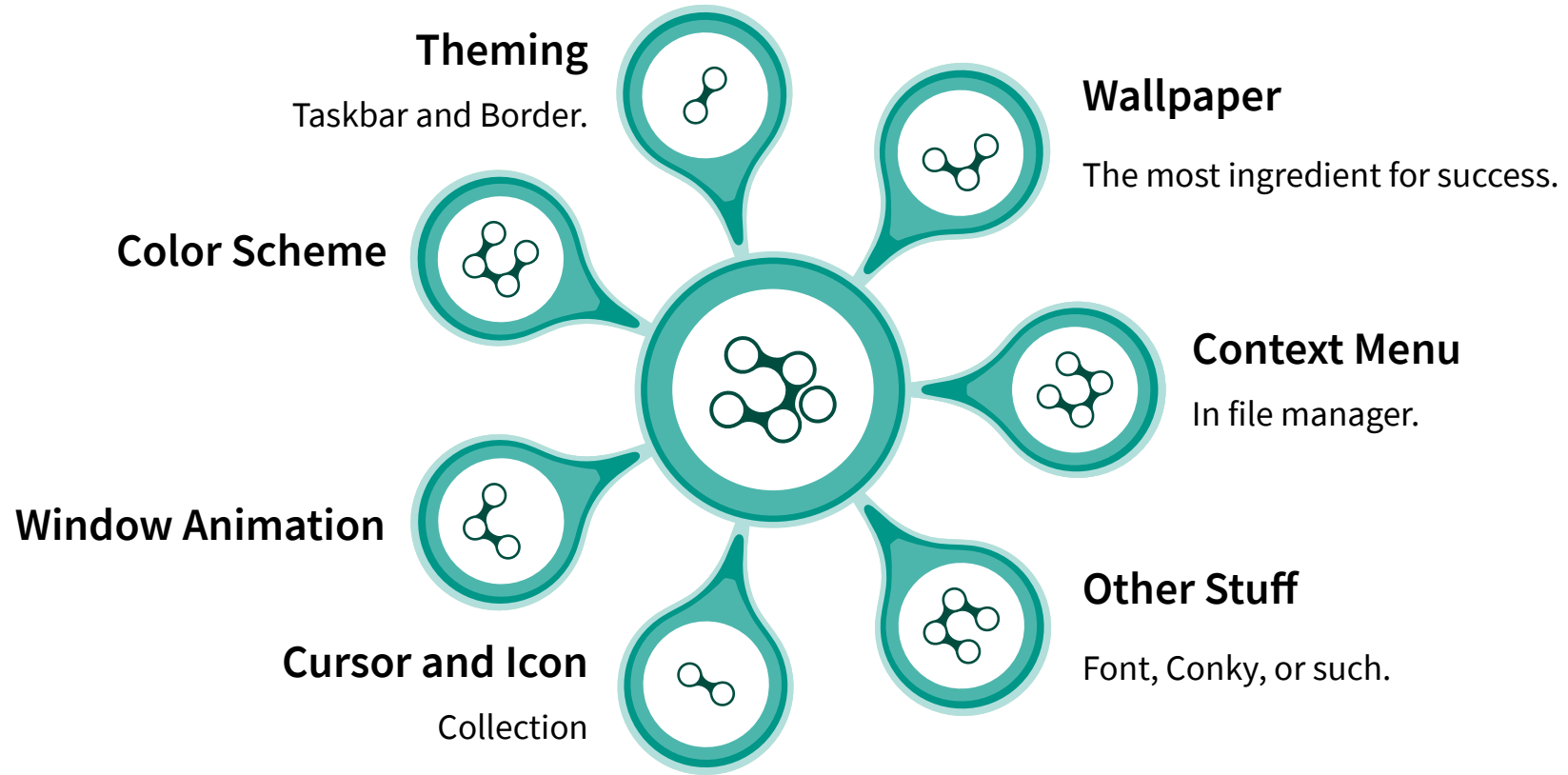
## LXQT with Windowish Looks, No Kidding

[[LXQT with Windowish Looks](#)]

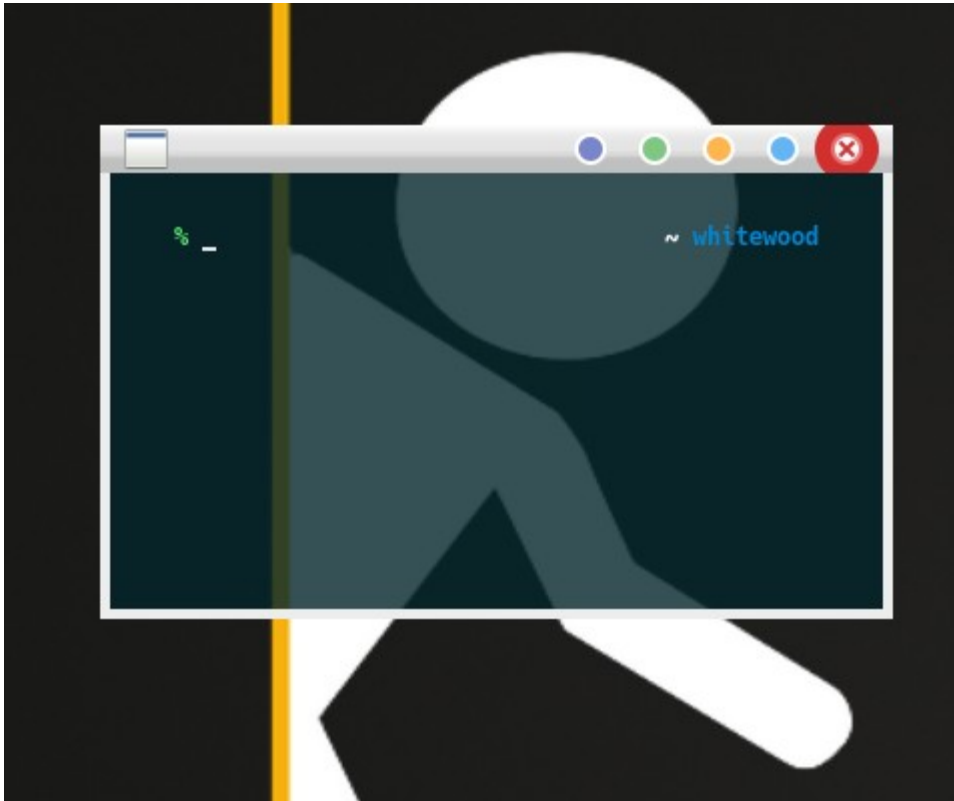
You can switch to any looks with parts from internet.



# What can I do with my DE?



## Example

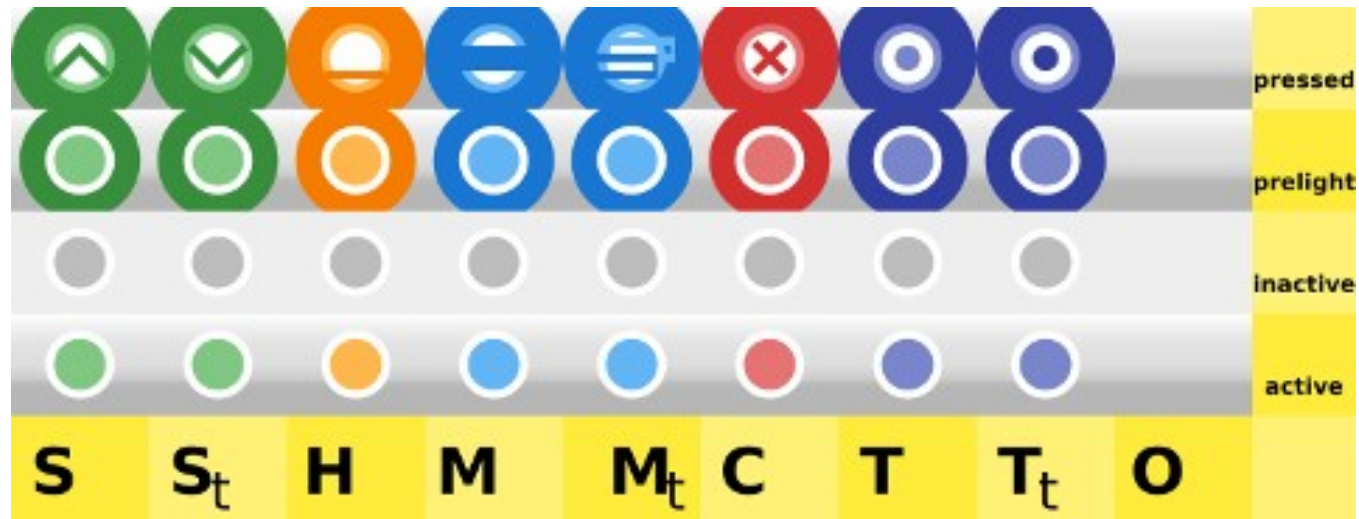


**Custom XFCE4 Theme:  
PNG Gradient over XPM**

[[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)

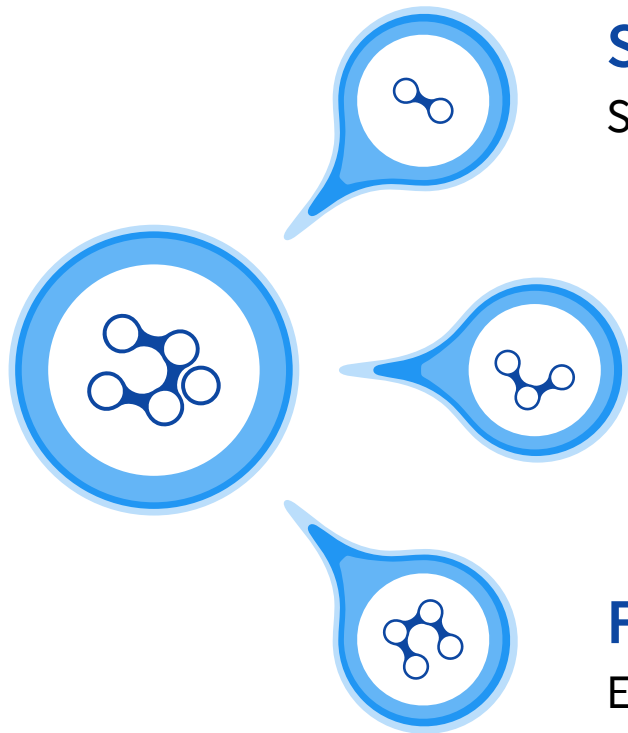




# Window Layout

# Window Layout

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



## Stacking

Suitable for ricing.

## Tiling

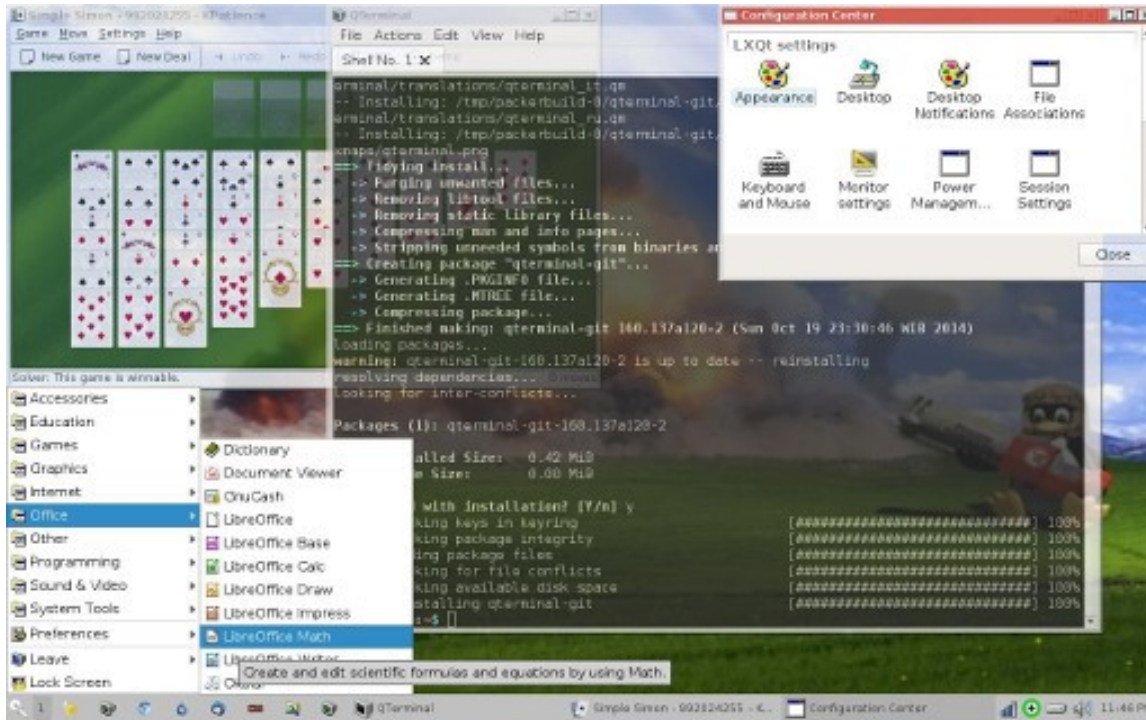
For masochist desktoper.  
Avoid n00b.

## Floating

Enable stacking in tiling.

## [LXQT with Windowish Looks]

## Stacking



## Stacking Layout Example: LXQT

# Tiling

```
13:30:40 Monday - ten past one
apsi ~ - ssh - s - yodart -5 git
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-labview 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 - ten past one
apsi ~ - ssh - s - aura -As git
usr/gstreamer-1.0-fluendo 0.10.35-1 (46) [0.83]
GStreamer 0.10 Fluendo mp3demux plugin
usr/pidgin-light 2.12.0-1 (46) [0.81]
A light piddin version: aus, jabber, irc supported
protocols without gstreamer, tcl, tk, screensaver sup
port.No video/voice. Includes finch
usr/gstreamer-1.0-base 0.10.35-1 (46) [13.72]
GStreamer Multimedia Framework Base plugin Libraries
usr/gstreamer-1.0-base-plugins 0.10.35-1 (46) [13.72]
GStreamer Multimedia Framework Base Plugins (gst-pl
ugins-base)
usr/gliber 1.3-3 (44) [0.00]
Simple lightweight gtk/gstreamer audio mixer
usr/gstreamer-1.0 0.10.35-1 (46) [11.34] [installed]
GStreamer Multimedia Framework
usr/oggstreamer-player 0.4.3 (20170504-1) [1] [1.20]
Is a small, clear and fast audio player for Linux w
ritten in C++, supported by the Gt framework. It uses
Gstreamer as audio backend.
usr/lib12-gstreamer-1.0 0.10.35-1 (22) [1.01]

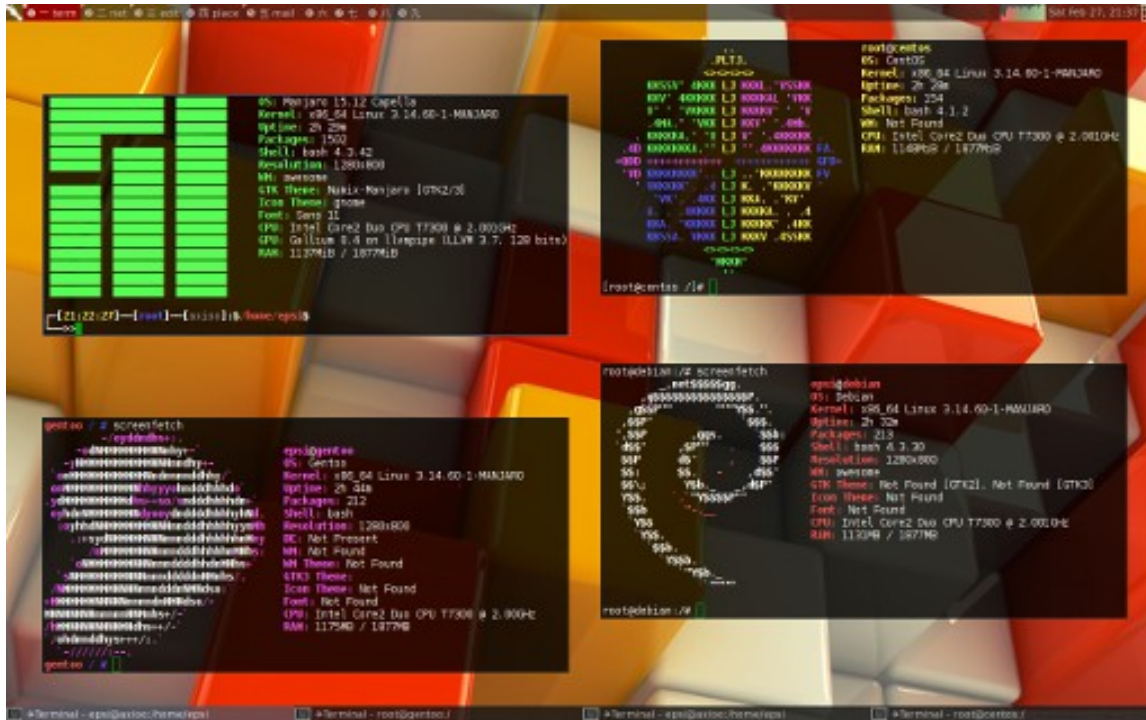
13:30:40 Monday - five past one
apsi ~ - ssh - s - packer -5s git --no-ssh
usr/av-caster 0.10.004-2 (1) [0.00]
A simple native gstreamer GUI for screencast,
webcam, and audio streaming
usr/blather-git 20150810-1 (4) [0.00]
Python application for speech recognition using
pocketsphinx and gstreamer. - latest git revision
usr/clutter-gst 2.98.5.051.00000000 (1) [0.00]

13:30:40 Monday - five to one
apsi ~ - ssh - s - packer -5s git --no-ssh
usr/gstreamer-1.0-fluendo 0.10.35-1 (46) [0.83]
GStreamer 0.10 Fluendo mp3demux plugin
usr/pidgin-light 2.12.0-1 (46) [0.81]
A light piddin version: aus, jabber, irc supported
protocols without gstreamer, tcl, tk, screensaver sup
port.No video/voice. Includes finch
usr/gstreamer-1.0-base-plugins 0.10.35-1 (46) [13.72]
GStreamer Multimedia Framework Base Plugins (gst-pl
ugins-base)
usr/gstreamer-1.0-base 0.10.35-1 (46) [13.72]
GStreamer Multimedia Framework Base Plugins
usr/gliber 1.3-3 (44) [0.00]
Simple lightweight gtk/gstreamer audio mixer
usr/gstreamer-1.0 0.10.35-1 (46) [11.34] [installed]
GStreamer Multimedia Framework
usr/oggstreamer-player 0.4.3 (20170504-1) [1] [1.20]
Is a small, clear and fast audio player for Linux w
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usr/lib12-gstreamer-1.0 0.10.35-1 (22) [1.01]

13:30:40 Monday - five to one
apsi ~ - ssh - s - packer -5s git --no-ssh
usr/gstreamer-1.0-base 0.10.35-1 (46) [13.72]
GStreamer Multimedia Framework Base plugin Libraries
usr/gstreamer-1.0-base-plugins 0.10.35-1 (46) [13.72]
GStreamer Multimedia Framework Base Plugins (gst-pl
ugins-base)
usr/gstreamer-1.0-good 0.10.35-1 (26) [5.72]
GStreamer Multimedia Framework Good Plugins
usr/gstreamer-1.0-good-plugins 0.10.35-1 (26) [5.72]
GStreamer Multimedia Framework Good Plugins
usr/gstreamer-1.0-ffmpeg 0.10.35-1 (12) [3.53]
GStreamer FFmpeg Plugin
usr/gstreamer-1.0-ugly 0.10.35-1 (11) [3.33]
GStreamer Multimedia Framework Ugly plugin Libraries
usr/gstreamer-1.0-ugly-plugins 0.10.35-1 (11) [3.33]
GStreamer Multimedia Framework Ugly Plugins
usr/gstreamer-1.0-python 0.10.35-1 (11) [3.11]
Python bindings for GStreamer 0.10
```

## Tiling Layout Example: HerbstluftWM

# Floating



## Floating Layout Example: AwesomeWM

# Ricing

Oct 11, 2020

Desktop Customization  
[epsi-rns.github.io](https://epsi-rns.github.io)

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# Ricing Guidance?

## Aesthetic is First class

It is a work of art.

## 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:

## Technical Difficulty

Basic knowledge is a must.

Technical difficulty is appreciated.

## 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.



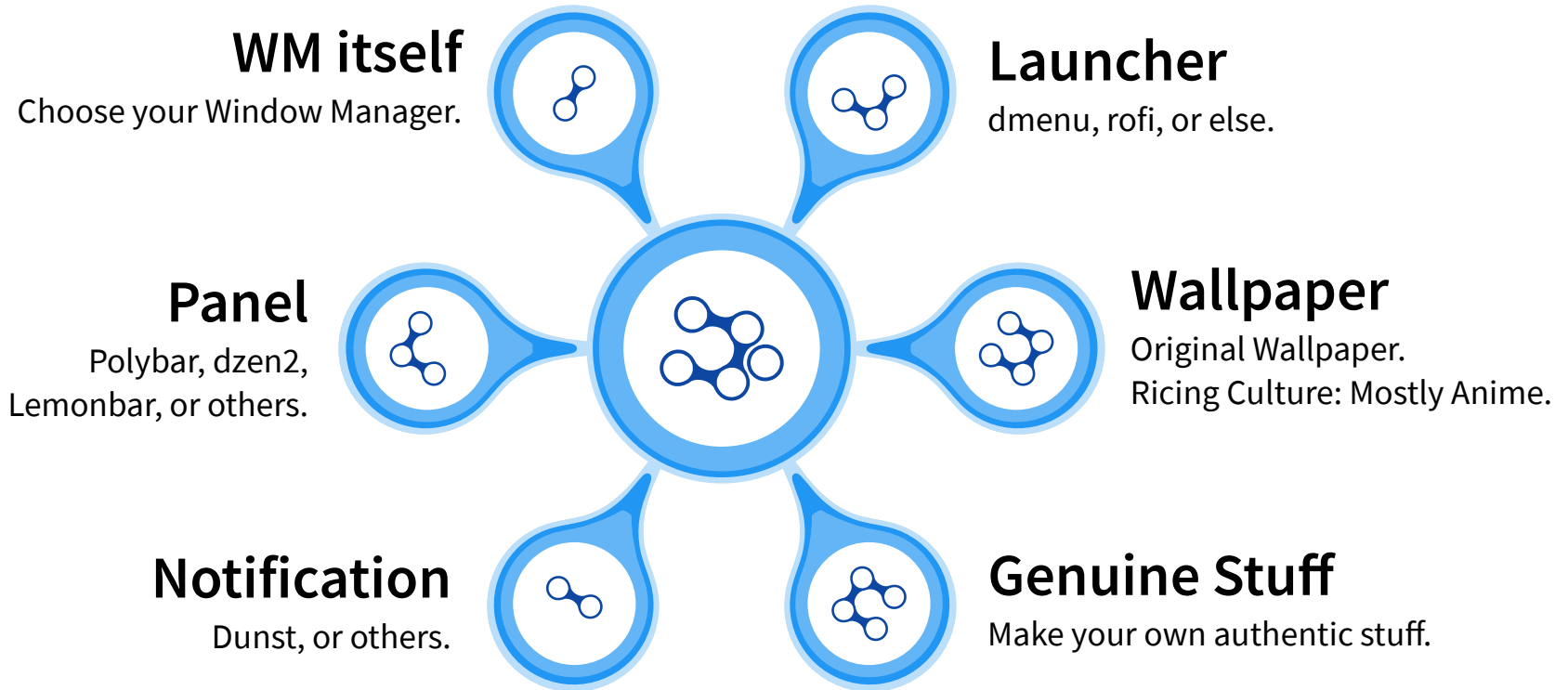
# Window Manager Customization

Oct 11, 2020

Desktop Customization  
[epsi-rns.github.io](https://epsi-rns.github.io)

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# Window Manager Parts?

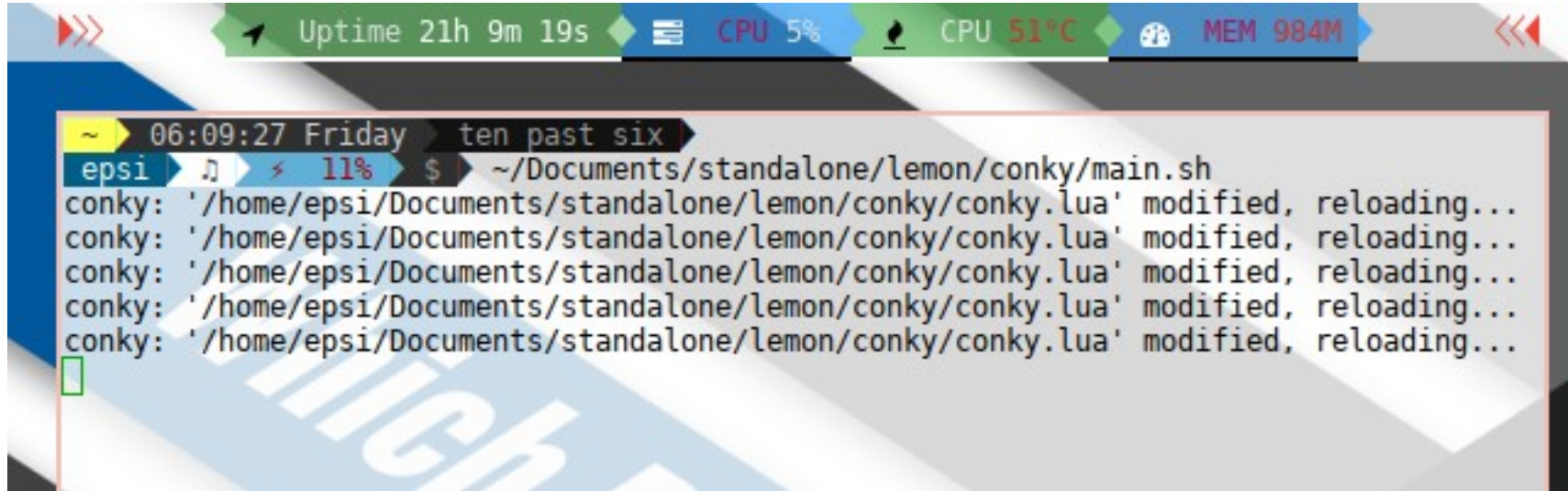


**Tips: There is no wrong or right. It is all about choices.**

# 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]

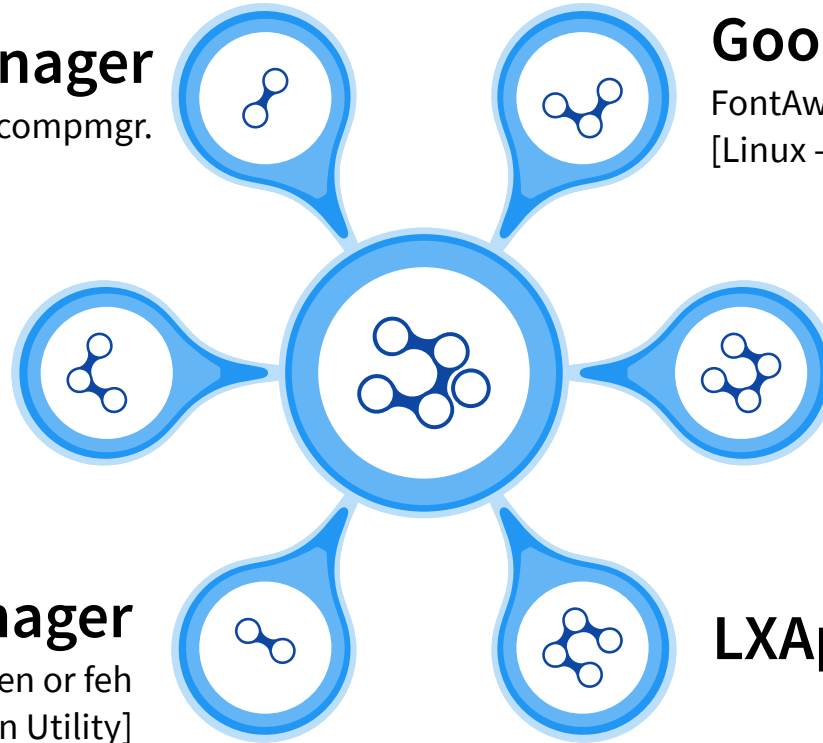
## Good Font

FontAwesome, siji, terminus  
[Linux - Installing Font]

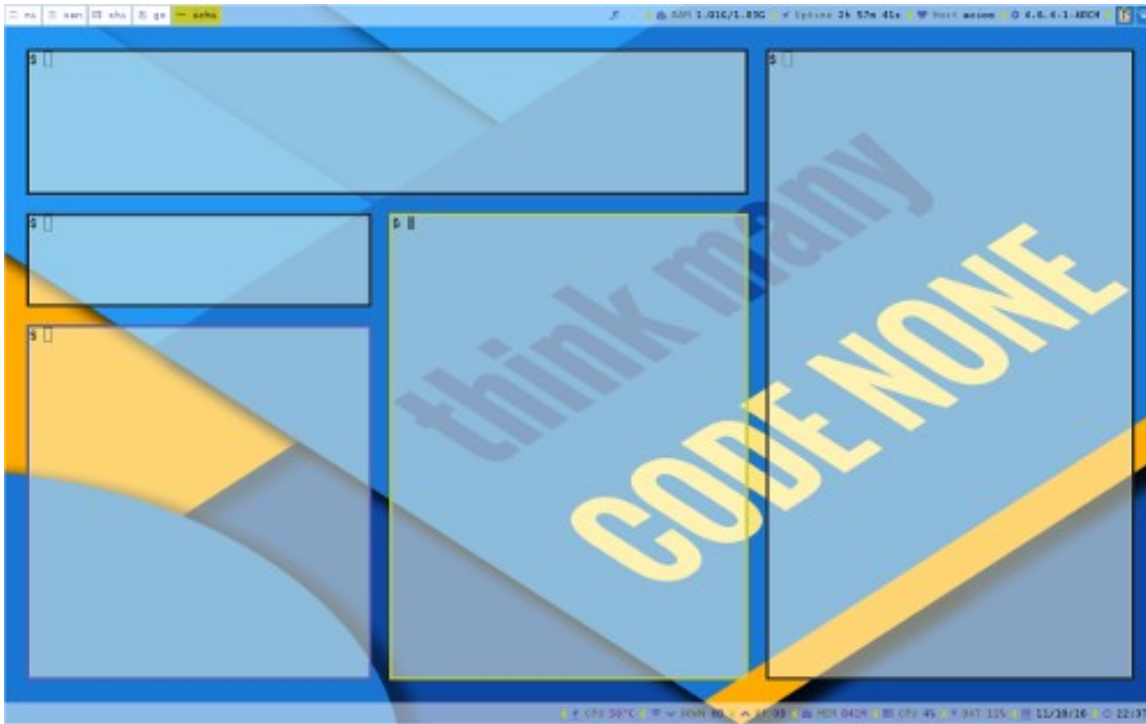
## Logging Out

OB Menu or others.

## LXAppearance



# Wallpaper



## Example: Original Material Wallpaper

[[More Inkscape Wallpapers](#)]

[[Manjaro Logo](#)]

# Stacking Window Manager

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Desktop Customization  
[epsi-rns.github.io](https://epsi-rns.github.io)

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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](#)]

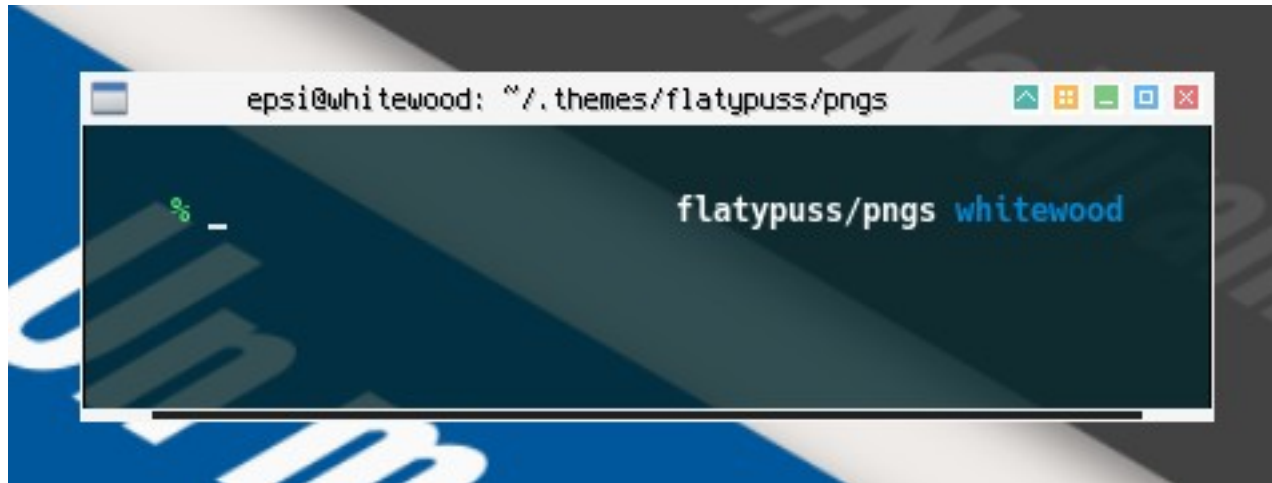


[[Fluxbox Overview](#)]

## Example: Openbox Theme: Multi Color

## Openbox Theme

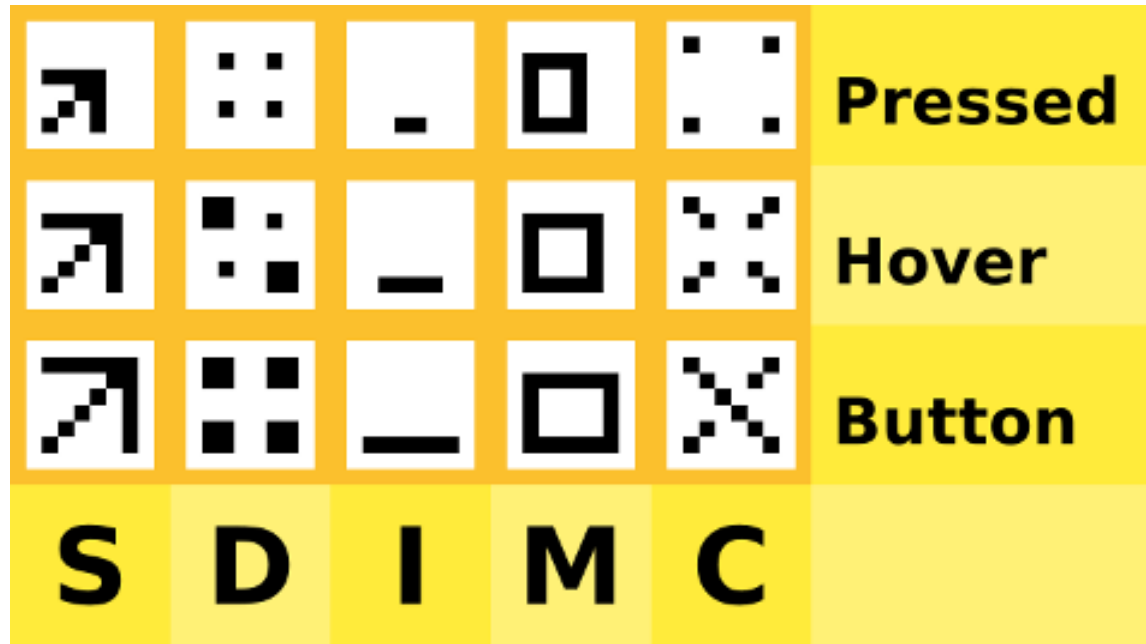
[[Openbox Theme - Special Trick](#)]



## Example: Theme

[[Openbox Theming with Inkscape](#)]

UI/UGM (User Interface/ Unified Graphic Material)



# Oldschool Fluxbox



## Example: Fluxbox

[Fluxbox with Glowing Wallpaper]

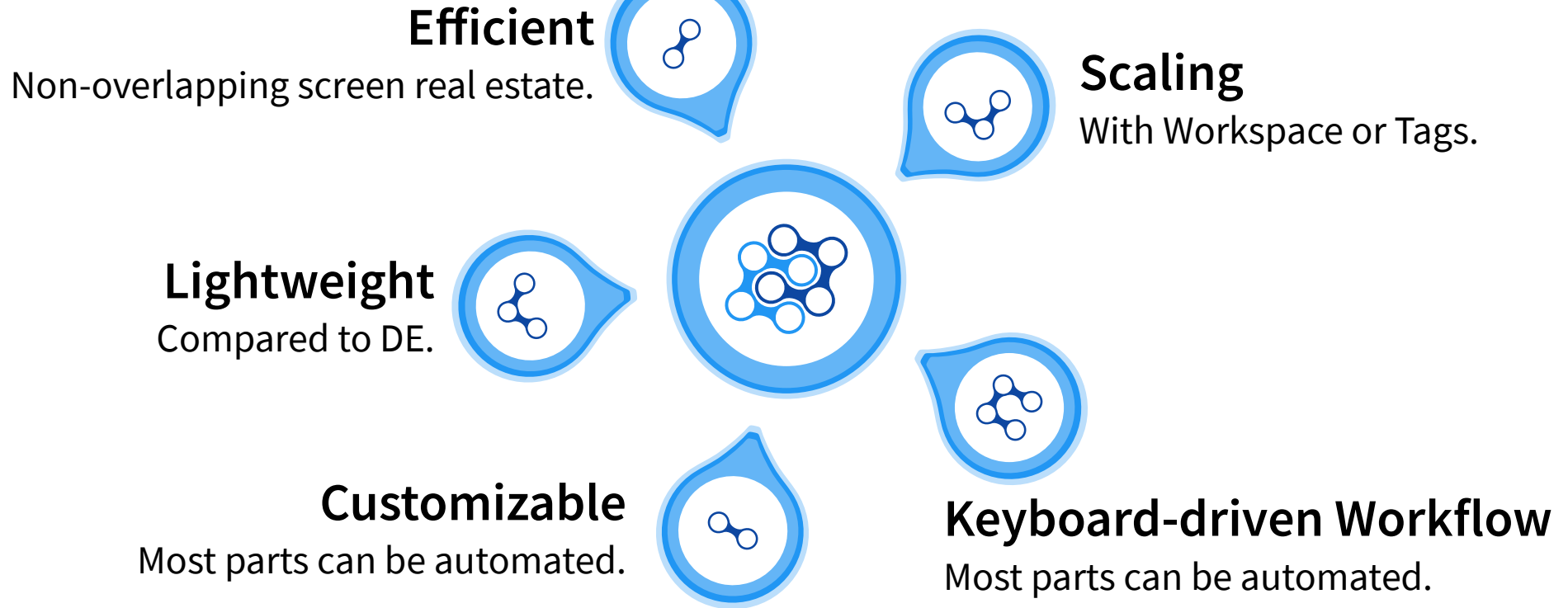
# Tiling Window Manager

Oct 11, 2020

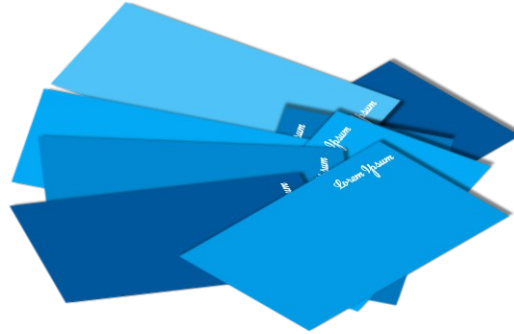
Desktop Customization  
[epsi-rns.github.io](https://epsi-rns.github.io)

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# Why Tiling Window Manager?



# 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)

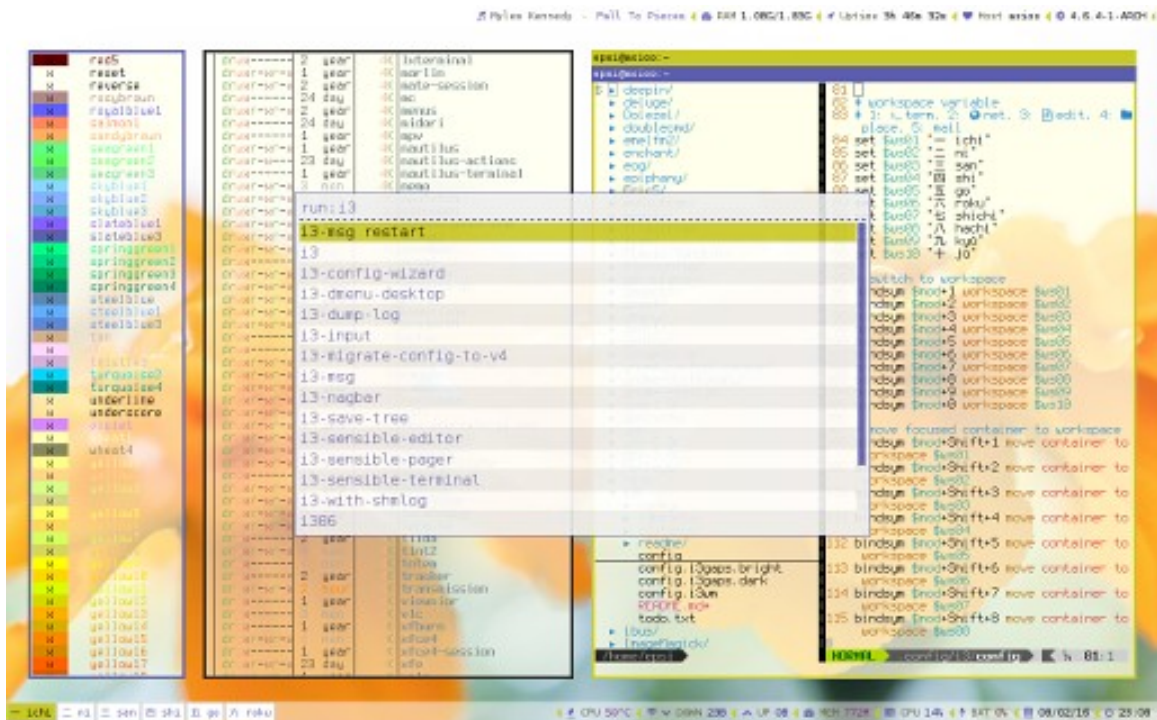


**corner ne**

Dynamic Window Manager

Example of presets layout:  
AwesomeWM.

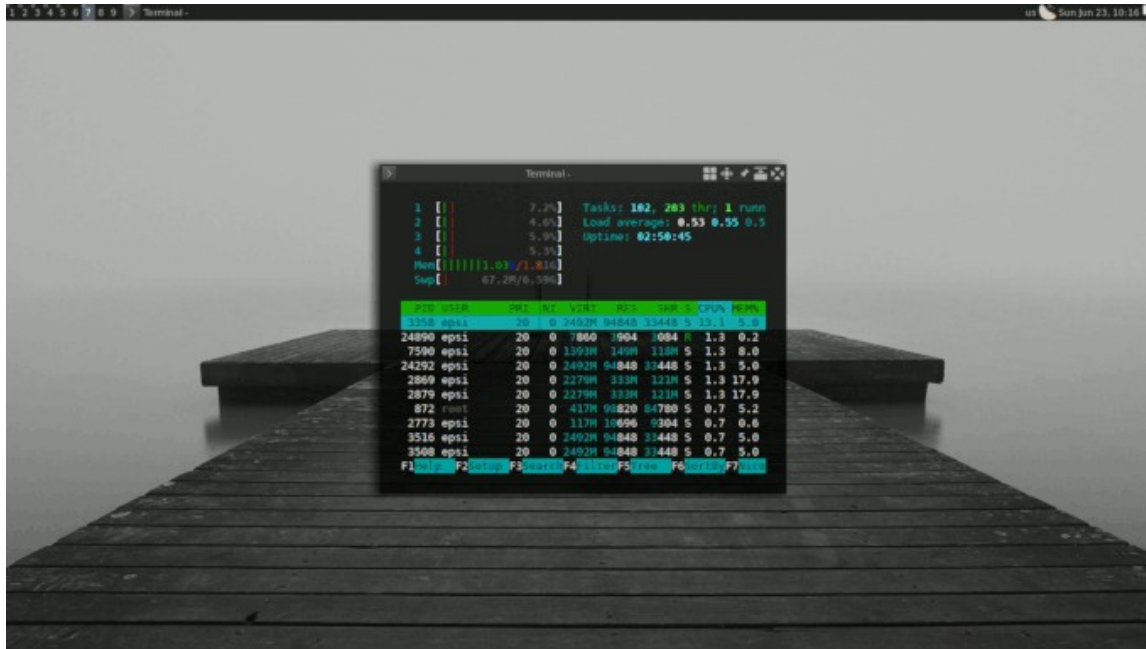
# i3wm with i3status



Example: i3wm (gaps,  
bright)

[Modular Conky Configuration]  
for i3status

# AwesomeWM (in video)



## Example: AwesomeWM

[Awesome WM - Binding Modules]

# More about AwesomeWM

[Article: Awesome WM - Overview]



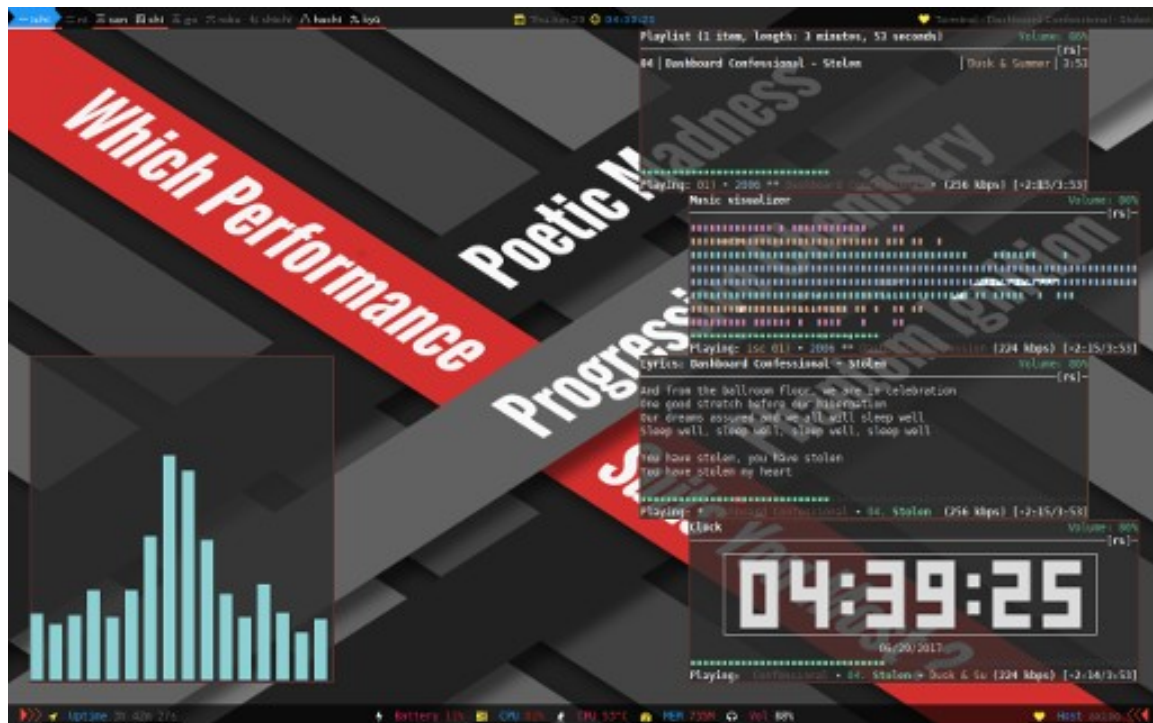
[Presentation: Awesome WM - Modularized]

[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 versus Wayland

# Terminal Customization

Oct 11, 2020

Desktop Customization  
[epsi-rns.github.io](https://epsi-rns.github.io)

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# Example of Terminal Ricing

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# 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]

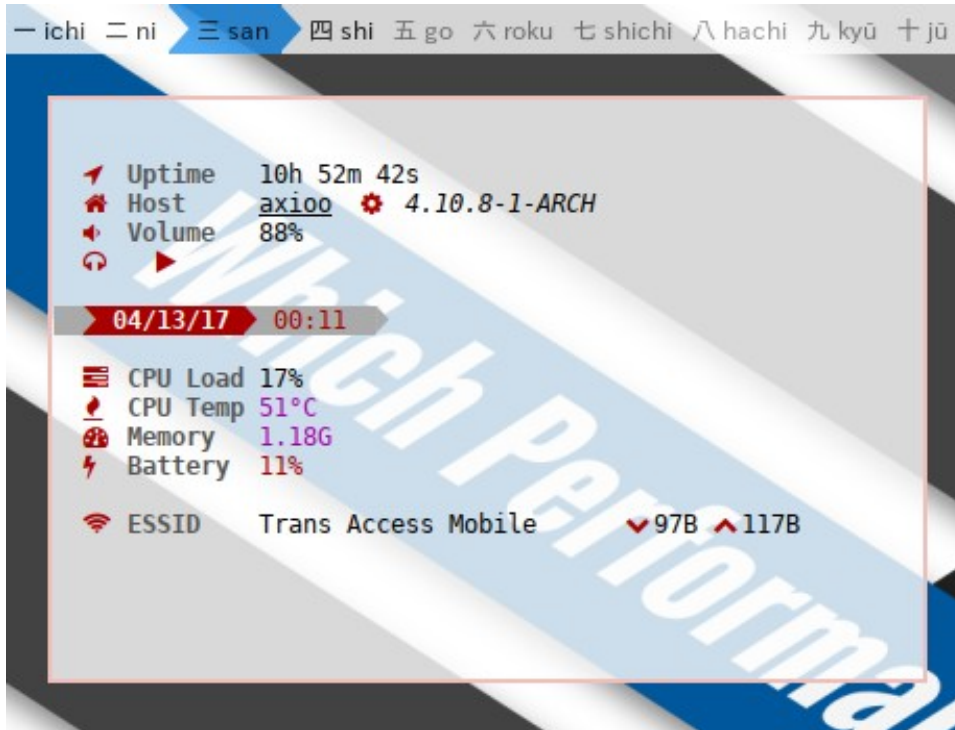


# CLI /siː ɛl aɪ/

## Example: Command Line Interface

[[Standalone CLI](#)]

System Monitoring Using Conky



## Example: Shell Prompt

A terminal window with a dark blue background and a light blue border. The top bar shows a sequence of Japanese characters: 一 ichi, 二 ni, 三 san, 四 shi, 五 go, 六 roku, 七 shichi, 八 hachi, 九 kyū. The main area shows a terminal session with a custom prompt 'epsi' in yellow. The session includes the command 'docker pull crux' and its output, which shows progress bars for pulling the latest image and downloading layers.

```
~ 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



# Where to Find Resources?

## Blog

English Blog: [[epsi-rns.github.io](https://epsi-rns.github.io)]

Local Blog: [[bandithijo.github.io](https://bandithijo.github.io)]

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

## dotshare.it

This is not a dead site.

[[dotshare.it](https://dotshare.it)]

## Dotfiles Examples

[[gitlab.com/epsi-rns/dotfiles](https://gitlab.com/epsi-rns/dotfiles)],

[[github.com/addy-dclxvi](https://github.com/addy-dclxvi)],

[[github.com/okitavera](https://github.com/okitavera)],

[[github.com/myugan](https://github.com/myugan)].

## Facebook Group

Example Community:

[[Linuxer Desktop Art](#)]

## Telegram Group

Example Community:

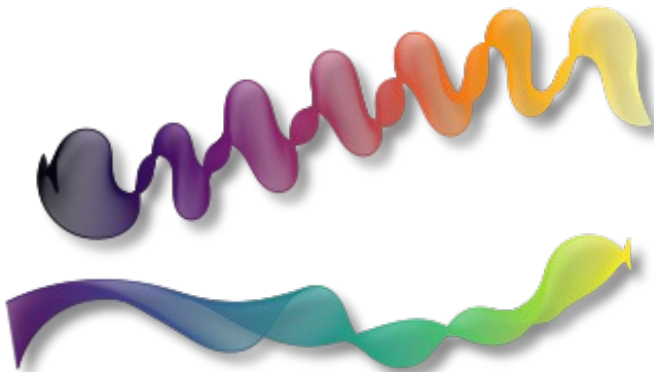
[[@dotfiles\\_id](#)] or,

[[@dotfiles\\_id\\_channel](#)],

[[@window\\_managers](#)].

## Reddit

# Origin of the Dotfiles Word

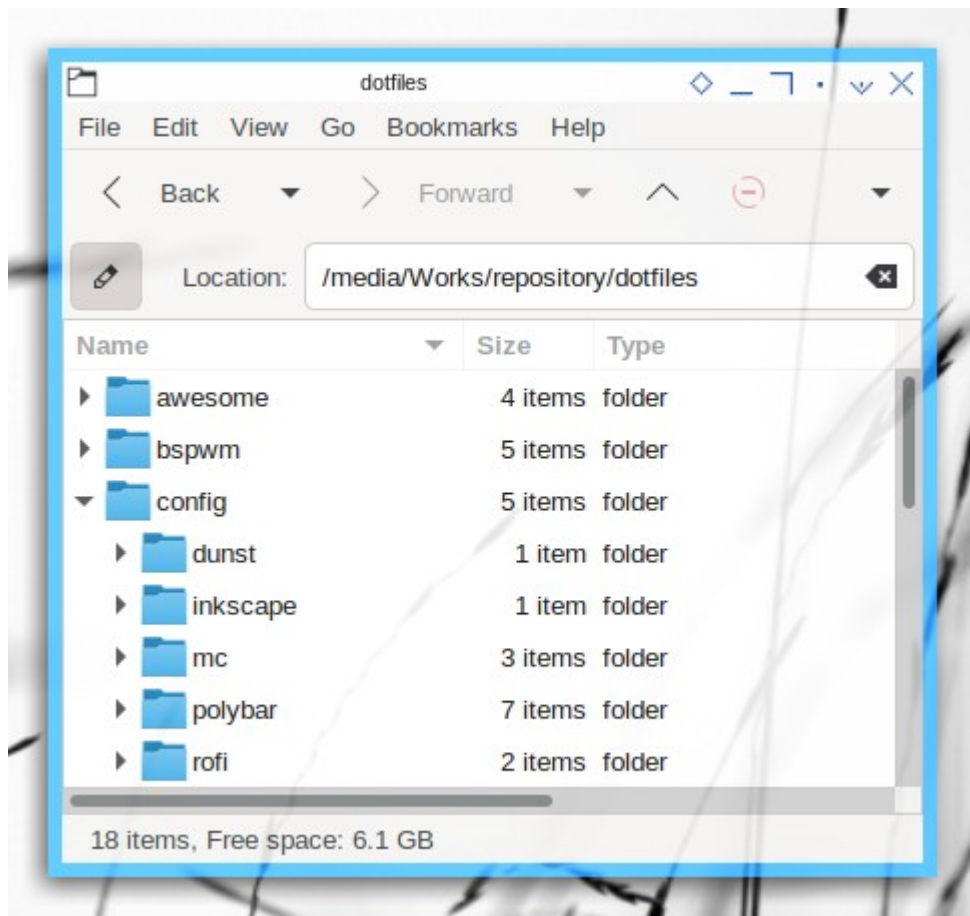


Configuration files on linux can be **shared** between hobbyist.

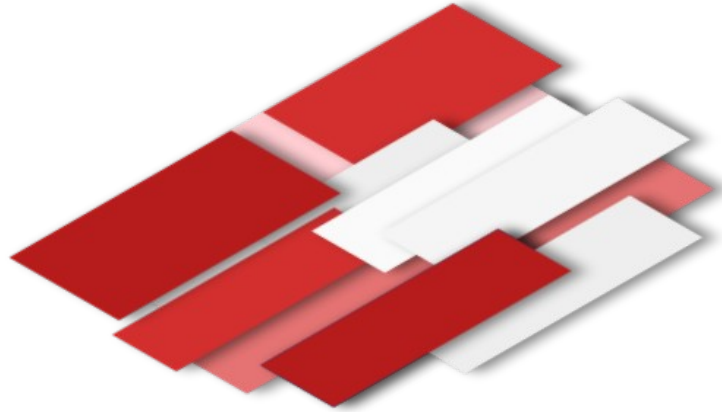
Configuration mostly lies under **.config** directory.  
Or single files with name started with **dot**.

# Managing Dotfiles

**Sharing Resources require good folder management.**

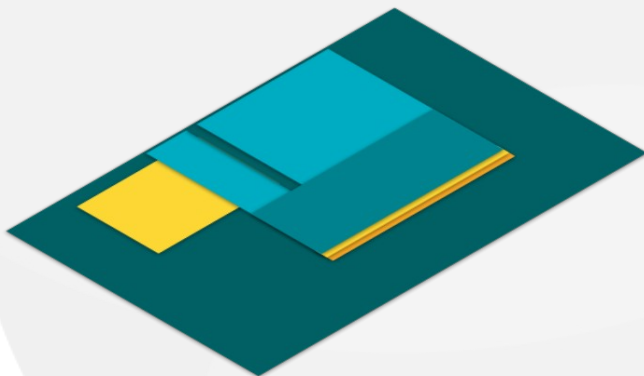


# I Share Mine



[\[gitlab.com/epsi-rns/dotfiles\]](https://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.