Arch-Z Guide

Important Note: Make sure to read the entire guide as there is essential NOTE at the end that you don't want to miss!

Introduction:

Welcome to the comprehensive guide of Arch-Z! This guide aims to provide you with a detailed understanding of this system, its philosophy, goals, and how to make the most out of it. Arch with i3wm combines the power of the Arch operating system with the minimalistic and highly customizable i3 window manager. This combination offers a user-friendly, efficient, and productive environment for your computing needs.

Philosophy and Goals

The philosophy behind Arch-Z is rooted in simplicity, minimalism, and the "do one thing and do it well" principle. The primary goals of this system include:

- User-Friendly Experience: Arch with i3wm focuses on providing an intuitive and efficient workflow, where users can easily navigate and manage their applications.
- Speed and Efficiency: By utilizing the lightweight i3 window manager, the system optimizes resource usage, resulting in faster performance and increased productivity.
- Customizability: This system empowers users to tailor their computing environment according to their preferences and workflows. You can customize everything, from keybindings to the appearance of your desktop.

i3wm Basics:

i3wm is a tiling window manager that heavily relies on keyboard shortcuts for performing various actions. The **Super (Windows)** key is the modifier key in Arch-Z. By pressing the modifier key in combination with other keys, you can execute specific commands and navigate through the system.

Video: Introduction to i3wm

> Press ' f ', then type ' 1 ', and press Enter to open the video, or copy the link (https://youtu.be/9RJtV8_DP3k)

Configuration Guide

All the dotfiles are located in ~/.config/

1. i3:

The i3 window manager utilizes several configuration files located at ~/.config/i3/ to customize its behavior. These files work together to define keybindings, window behavior, and workspace layout, allowing you to tailor i3wm to your specific workflow. Let's explore each of these files:

- **i3/config**:

  The main configuration file for i3wm. It includes all the necessary files for window placement rules, switching between workspaces, workspace assignments, resize windows, and other settings.

- **i3/colors.conf**:

  The colors.conf file defines the color scheme of window borders, backgrounds, text, and other UI elements used in i3wm. Configure the color palette to match your preferences or integrate with your preferred theme.

- **i3/workspaces.conf**:

  The workspaces.conf file allows you to define and organize your workspaces in i3wm. Assign meaningful names or labels to each workspace to reflect their purpose or content. Define the layout for each workspace, such as tabbed, stacked, or split containers. Specify the applications that should open on specific workspaces for seamless multitasking.

- **i3/autostart.sh**:

  The autostart.sh script is executed when i3wm starts and is used to launch various applications automatically. Add commands to start desired applications on startup, such as a compositor or system tray.

2. sxhkd/sxhkdrc (Simple X Hotkey Daemon):

The sxhkdrc file defines all the keybindings that Arch-Z uses. Customize and define additional keybindings for various actions and commands in this file.

3. scripts:

The scripts directory contains various scripts used in conjunction with i3wm.

- brightness-control.sh:

  This script handles brightness control using the brightnessctl utility.

  Configuration:

  1. Use the brightnessctl -l command to identify the backlight control directory specific to your system.
  2. Update the intel_backlight part in the decrease_brightness() and increase_brightness() functions with your specific backlight control directory.

- help_notification.sh:

  This script displays the startup notification for the Guide (it just tells you to press Super + Shift + h to see this Guide). You can delete it and remove the 10th line from ~/.config/i3/config.

- keyboard_layout.sh:

  A script to toggle between different keyboard layouts AR and FR (this script is optional). You can delete it and remove the "109,110,111" lines from ~/.config/sxhkd/schkdrc or configure it as you need.

- resolution.sh:

  A script to set the screen resolution or switch between different display configurations.

- resolution-double.sh:

  A script to set the screen resolution to two monitors.

- bookmarks.sh:

  A script to opens my bookmarks.

- bookmarks_pdf.sh:

  This script bookmarks pages of a PDF docs based on the user's input, and storing the bookmarks in a file.

- conf.sh:

  A script that opens the confige files that i edit frequently.

- mpv-youtube.sh:

  A script that plays a youtube video from a URL stored in the clipboard using the mpv Media Player

- set-double-display.sh:

  A script that sets up a specific display configuration (two monitors) and potentially applies wallpapers using the sourced script (last-two-wallpapers.sh).

- set-single-display.sh:

  A script that sets up a specific display configuration (single monitor) and potentially applies wallpapers using the sourced script (last-single-wallpapers.sh).

- web_blocker.sh:

  This script temporarily blocks YouTube by redirecting its domain to localhost. After a specified duration, YouTube is unblocked, and a notification is sent. (you can change youtube to any website you want to block for increasing your productivity)

- c/compile.sh:

  This script allows the user to choose a C project directory, compile the main.c file, and run the resulting executable. It assumes the C projects are stored in /home/$USER/Documents/c_projects and that each project directory contains a main.c file.

- c/new_project.sh:

  This script creates a new directory, main.c file, and opens it in Vim for editing within a specific directory for C projects. It allows users to enter the name of the file and provides a basic C code template in the main.c file.

- c/old_project.sh:

  This script changes to a specific directory for C projects, displays a list of directories, prompts the user to select a project, navigates to the chosen project directory, and opens the main.c file in Vim for editing.

4. dunst (Notification Daemon):

- Dunst is a lightweight notification daemon that displays pop-up notifications on your desktop. You can configure its behavior and appearance through the ~/.config/dunst/dunstrc configuration file.

5. rofi (Application Launcher):

- Rofi is a versatile application launcher and window switcher. Its configuration file is located at ~/.config/rofi/config.rasi. Customize its appearance, behavior, and keybindings to suit your needs.

6. polybar (Status Bar):

- Polybar is a fast and easy-to-use status bar that integrates well with i3wm. Its configuration file is located at ~/.config/polybar/config. Modify the configuration to customize the appearance and modules displayed in the status bar.

7. kitty (Terminal Emulator):

- kitty is the default terminal emulator used in Arch-Z. You can configure kitty's behavior through its configuration file located at ~/.config/kitty/kitty.conf. Customize the terminal's appearance, keybindings, and other settings to your liking.

8. ranger (File Manager):

- Ranger is a console-based file manager used in Arch-Z. Its configuration files are located at ~/.config/ranger/. Customize keybindings, appearance, and behavior in these files.

Keybindings:

Window Manager Keybindings:

- super + shift + h: Opens this Guide
- super + Escape: Reloads sxhkd config
- super + shift + c: Reloads the i3 window manager configuration
- super + shift + r: Restarts the i3 window manager
- super + shift + q: Exits i3 window manager
- super + q: Closes the current window

Application Keybindings:

- super + Return (Enter): Launches kitty terminal
- super + shift + Return (Enter): Launches kitty terminal in scratchpad mode
- super + p: Opens rofi application
- alt + w: Opens rofi (show mode)
- super + n: Opens pcmanfm file manager
- super + r: Opens ranger file manager
- super + c: Launches VSCode
- super + w: Launches Brave Browser
- super + s: Launches FileZilla
- super + t: Launches Telegram Desktop
- Print (Impr écran Syst): Opens flameshot screenshot tool (GUI mode)

Audio Keybindings:

- XF86AudioMute: Toggles audio mute
- XF86AudioLowerVolume: Decreases audio volume by 5%
- XF86AudioRaiseVolume: Increases audio volume by 5%

Brightness Keybindings:

- XF86MonBrightnessDown: Decreases audio volume by 10%
- XF86MonBrightnessUp: Increases audio volume by 10%

i3 Window Manager Keybindings:

- super + v: Splits the current container vertically
- super + h: Splits the current container horizontally
- super + f: Toggles fullscreen mode for the current container
- super + shift + f: Toggles floating mode for the current container
- super + control + space: Toggles focus between tiling and floating mode
- super + alt + a: Focuses on the parent container
- alt + shift + s: Change container layout to stacked
- alt + shift + t: Change container layout to tabbed
- alt + shift + e: Change container layout to toggle split

Workspace Keybindings:

- super + [1->9,0]: Switches to the specified workspace
- super + shift + [1->9,0]: Moves the current container to the specified workspace

Window Movement Keybindings:

- super + [h, j, k, l]: Focuses on the window in the specified direction
- super + shift + [h, j, k, l]: Moves the window in the specified direction
- super + [Left, Down, Up, Right]: Focuses on the window in the specified direction
- super + shift + [Left, Down, Up, Right]: Moves the window in the specified direction
- super + tab: Focuses on the last two workspaces back and forth

Additional Keybindings:

- alt + x: Opens ranger in /mnt/FILES/My_Stuff/Watch (Where I keep all the courses and videos I need to learn from), (not created by default)
- alt + c: Opens the config files that I edit frequently
- alt + b: Opens my bookmarks (Change the path to your bookrmarks from the script)
- alt + s: Opens my Work/Studies Schedule (Create your own schedule and change the path to it)
- alt + y: Runs the ~/.config/scripts/mpv-youtube.sh script that plays youtube videos using mpv (you must copy first the URL of a youtube video)
- alt + shift + y: Runs the ~/.config/scripts/web_blocker.sh script that temporarily blocks a specific website (Youtube by default)
- alt + shift + n: Runs the ~/.config/scripts/c/new_project.sh script to create a new C project
- alt + shift + o: Runs the ~/.config/scripts/c/old_project.sh to enter the existing C projects
- F1: Changing the wallpaper for the main monitor (Add your wallpapers in ~/.config/wallpapers/)
- F2: Changing the wallpaper for two monitors

Gaps Keybindings:

- super + shift + n: Adjusts inner and outer gaps simultaneously
- super + x: Increases outer gaps by 5
- super + shift + x: Decreases outer gaps by 5
- super + z: Increases inner gaps by 5
- super + shift + z: Decreases inner gaps by 5
- super + ctrl + [Left, Down, Up, Right]: Resizes the current window

System Keybindings:

- super + shift + b: Reboots the system
- super + shift + s: Shuts down the system

Workspace Assignments:

Workspace 1	Brave Browser
Workspace 2	Pcmanfm (File Manager)
Workspace 3	Codium (VSCodium Editor)
Workspace 4	Telegram Desktop
Workspace 5	FileZilla

IMPORTANT NOTE:

Changing the wallpaper

Add all your wallpapers in ~/.config/wallpapers/, and to use the keybindings for changing the wallpaper and ensure that the chosen wallpaper remains even after restarting your computer, follow these instructions:

1. Open a terminal.
2. Type the following command to open the i3 configuration file: `nano ~/.config/i3/config`
3. Locate the line that starts with `exec_always feh --bg-fill ~/.config/wallpapers/wallpaper.jpg` and add the `#` symbol to comment the line.
4. Uncomment the line that starts with `#exec_always --no-startup-id ~/.fehbg`
5. Save the file and exit the editor.

By uncommenting these lines in the i3 configuration file, you enable the execution of the `feh` command to set the wallpaper and ensure that it persists across system restarts. The `~/.fehbg` file contains the command to restore the wallpaper on startup.

Conclusion

Thank you for choosing Arch-Z! This guide will provide you with all the information you need to get started and make the most out of your Arch-Z experience. Use this guide to enhance your productivity and customize your computing environment to suit your needs. Enjoy the simplicity, speed, and efficiency provided by Arch-Z!