Debian-Z Guide

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

Introduction:

Welcome to the comprehensive guide of Debian-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. Debian with i3wm combines the power and stability of the Debian 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 Debian-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: Debian 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 Debian-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

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 Debian-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.

- 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).

- themes.sh:

  A script that allows the user to select and apply a theme from a collection of theme scripts located in the ~/.config/scripts/themes

- 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. alacritty (Terminal Emulator):

- alacritty is the default terminal emulator used in Debian-Z. You can configure alacritty's's behavior through its configuration file located at ~/.config/alacritty/alacritty.yml. 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 Debian-Z. Its configuration files are located at ~/.config/ranger/. Customize keybindings, appearance, and behavior in these files.

9. neofetch (System Information Tool):

- Neofetch is a command-line tool that displays system information.. Its configuration file is located at ~/.config/neofetch/config.conf. Configure neofetch to show the desired information in the terminal.

Keybindings:

Window Manager Keybindings:

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

Application Keybindings:

Keybinding	Action
super + Return (Enter)	Launches alacritty terminal
super + shift + Return (Enter)	Launches alacritty terminal in floating 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 + g	Opens Github Desktop (not installed by default)
super + w	Launches Brave Browser
super + c	Launches VSCodium
super + d	Launches Discord (not installed by default)
super + t	Launches Telegram Desktop
Print (Impr écran Syst)	Opens flameshot screenshot tool (GUI mode)

Audio Keybindings:

Keybinding	Action
XF86AudioMute	Toggles audio mute
XF86AudioLowerVolume	Decreases audio volume by 2%
XF86AudioRaiseVolume	Increases audio volume by 2%

Brightness Keybindings:

Keybinding	Action
XF86MonBrightnessDown	Decreases audio volume by 10%
XF86MonBrightnessUp	Increases audio volume by 10%

i3 Window Manager Keybindings:

Keybinding	Action
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:

Keybinding	Action
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:

Keybinding	Action
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 + b	Focuses on the last two workspaces back and forth

Additional Keybindings:

Keybinding	Action
alt + x (Where I keep all the courses and videos I need to learn from)	Opens ranger in ~/Downloads/Watch (not created by default)
alt + c	Opens the confige files that i edit frequently
alt + t	Change the theme on the fly
alt + b	Opens my bookmarks (add yours inside ~/config/bookmarks.txt)
alt + y (you must copy first the URL of a youtube video)	Script that plays youtube videos using the mpv
alt + s (Create your own schedule in ~/Pictures/schedule.png)	Opens my Work/Studies Schedule
F1 (Add your wallpapers in ~/.config/wallpapers/)	Changing the wallpaper for the main monitor
F2	Changing the wallpaper for two monitors

Gaps Keybindings:

Keybinding	Action
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:`

`Keybinding`	**`Action`**
`super + shift + b`	`Reboots the system (sudo reboot)`
`super + shift + s`	`Shuts down the system (sudo shutdown now)`

Workspace Assignments:

Workspace 1	Brave Browser
Workspace 2	Pcmanfm (File Manager)
Workspace 3	Codium (VSCodium Editor)
Workspace 4	Telegram Desktop
Workspace 5	Discord
Workspace 10	Github Desktop

IMPORTANT NOTES:

NOTE N°01:

To ensure that the keybindings for reboot and shutdown work seamlessly, please follow these steps:

1. Open a terminal.
2. Type the following command: `sudo visudo`
3. Locate the line that starts with "%sudo ALL=(ALL:ALL) ALL".
4. Add two new lines below it with the following content:
   - your-user-name ALL=(ALL) NOPASSWD: /sbin/reboot
   - your-user-name ALL=(ALL) NOPASSWD: /sbin/shutdown now
5. Save the file and exit the editor.

By making these changes in the sudoers file, you will grant your user the necessary privileges to execute the reboot and shutdown now commands without being prompted for a password. This will ensure that the keybindings for rebooting and shutting down your system work smoothly.

NOTE N°02:

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/wall.png` 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 Debian-Z! This guide will provide you with all the information you need to get started and make the most out of your Debian-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 Debian-Z!