BlueNova Guide

© Salim Zaidi

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 BlueNova! 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 BlueNova 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 BlueNova. By pressing the modifier key in combination with other keys, you can execute specific commands and navigate through the system.

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.

- **i3/sxhkd/sxhkdrc**:

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

- **i3/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/i3/sxhkd/schkdrc or configure it as you need.

  - resolution.sh:

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

2. 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.

3. rofi (Application Launcher):

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

4. 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.

5. kitty (Terminal Emulator):

- Kitty is the default terminal emulator used in BlueNova. 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.

6. ranger (File Manager):

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

7. 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 + shift + q	Exits i3 window manager

Application Keybindings:

Keybinding	Action
super + Return (Enter)	Launches kitty terminal
super + space	Opens rofi application
alt + p	Opens rofi (default mode)
super + r	Opens ranger file manager in kitty terminal
super + n	Opens thunar file manager
super + r	Opens ranger file manager

super + g	Opens Geany editor
super + w	Launches Brave Browser
super + c	Launches VSCodium
super + d	Launches Discord (not installed by default)
super + t	Launches Telegram Desktop
super + s	Opens flameshot screenshot tool (GUI mode)
super + m	Opens pavucontrol audio control panel

Audio Keybindings:

Keybinding	Action
XF86AudioMute	Toggles audio mute
XF86AudioLowerVolume	Decreases audio volume by 2%
XF86AudioRaiseVolume	Increases audio volume by 2%
alt + d	Increases audio volume by 2dB
alt + a	Decreases audio volume by 2dB
XF86AudioPlay	Play/Pause media player
ctrl + alt + p	Play/Pause media player
XF86AudioNext	Skips to next track
XF86AudioPrev	Skips to previous track
ctrl + shift + period	Skips to next track
ctrl + shift + comma	Skips to previous track
XF86AudioStop	Stops media player
alt + h	Controls media player (prev)
alt + j	Controls media player (next)
alt + k	Controls media player (play)
alt + l	Controls media player (pause)

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 + space	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
super + b	Changing the wallpaper for the main monitor
super + shift + f	Changing the wallpaper for two monitors

Workspace Keybindings:

Keybinding	Action
super + [1-9]	Switches to the specified workspace
super + shift + [1-9]	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

Additional Keybindings:

Keybinding	Action
super + q	Closes the current window
super + shift + c	Reloads the i3 window manager configuration
super + shift + r	Restarts the i3 window manager
super + ctrl + [Left, Down, Up, Right]	Resizes the current window

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

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	Thunar (File Manager)
Workspace 3	Codium (VSCodium Editor)
Workspace 4	Telegram Desktop
Workspace 5	Discord
Workspace 10	Geany

IMPORTANT NOTES:

NOTE N°01:

Press **super + space**, type and open LXAppearance and set the theme to BlueSky-Clean-Dark, select the Papirus icons, and set the cursor to Fluent to enjoy a stylish and visually appealing desktop experience.

NOTE N°02:

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°03:

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/main.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 BlueNova! This guide will provide you with all the information you need to get started and make the most out of your BlueNova 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 BlueNova!