pi400-base

nrobinson2000

Introduction

Figure 1: The Raspberry Pi 400 Computer

Introduction
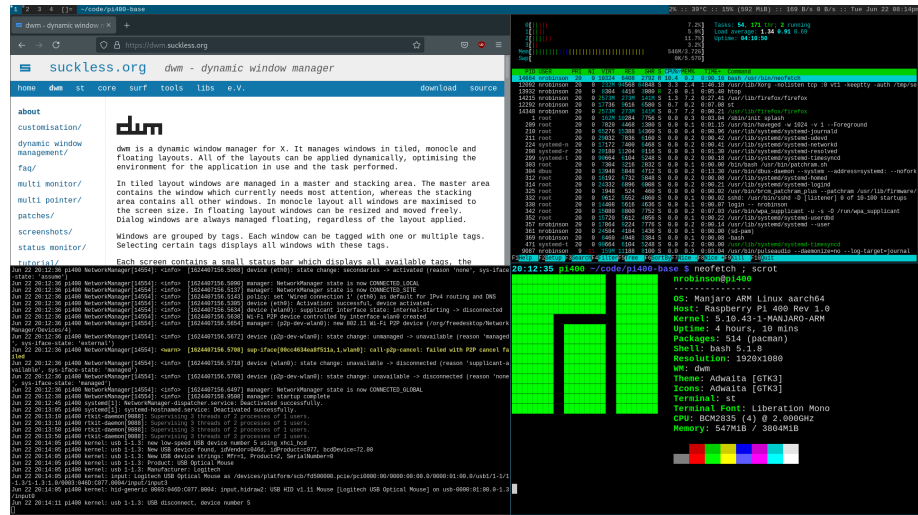

Figure 2: Running firefox, htop, journalctl, and neofetch in dwm

Introduction

This repository is a post-installation setup configuration for Manjaro ARM that provides a minimal desktop environment based on dwm.

Key Features

- Dotfiles for bash, vim, git, conky, xinit
- Lists of packages to replicate my desktop environment
- Manage vim plugins with **vim-plug**

Why use Manjaro ARM on the Pi 400?

- While there are many Linux distributions available for the Raspberry Pi, few of them are optimized for productive desktop use.

- The official Raspberry Pi OS is designed for novice users and is still based on 32-bit ARM, lacking support for ARM64 applications.

- I chose Manjaro ARM for this system because it is 64-bit, Arch-based, and provides a minimal installation image.

- I've found Arch-like distributions to be more useful on the desktop than Debian-like distributions for many reasons.

Why use dwm on the Pi 400?

- While there are many editions of Manjaro for the Raspberry Pi featuring desktop environments like Xfce, KDE, and GNOME, which attempt to make the Pi seem like a typical Linux desktop, they achieve poor performance due to the lower specs of the Raspberry Pi.

- Frankly, running a fully-featured desktop environment on a Raspberry Pi is counterproductive, since a desktop environment requires a large share of resources.

- Because dwm is more efficient and minimalist, you can achieve greater productivity.

Prerequisites

- You will need a fresh installation of Manjaro ARM Minimal. The minimal edition is preferable because there are fewer unnecessary packages installed by default.

- You must be comfortable with the terminal and using Vim since the keybindings in dwm are inspired by Vim.

Installation

On a newly installed Manjaro ARM system clone this repository:

```
$ sudo pacman -S git
$ git clone https://github.com/nrobinson2000/pi400-base
$ cd pi400-base
```

Before running install.sh, read through the script with your text editor
and verify that you are content with the changes that it will make. To
accept the script, uncomment the DOTFILES_AGREE="true" line in
install.sh.

After accepting, run the script with the following:

```
$ ./install.sh
```

The script can take around 10 minutes to complete. After the script
finishes, reboot your system. After logging in, run startx to launch dwm.

Useful shortcuts

Launchers
- `ALT + P` - Launch dmenu
- `SHIFT + ALT + ENTER` - Launch st

System
- `SHIFT + ALT + C` - Close a window
- `SHIFT + ALT + Q` - Quit dwm (all running windows will be stopped)

Useful shortcuts

Window management

- `ALT + J/K` - Move focus through window stack
- `ALT + H/L` - Adjust width of master area
- `ALT + I/D` - Adjust number of windows in master area

Workspaces/Multi-Monitor

- `ALT + n` - Move focus to workspace n
- `SHIFT + ALT + n` - Move window to workspace n

Useful shortcuts

For more shortcuts, refer to the `dwm` and `st` man pages.

As `dwm` and `st` are highly customizable, you can edit the `config.h` file in each project to add additional keybindings or change settings.

dwm

```
$ git clone git://git.suckless.org/dwm
```

st

```
$ git clone git://git.suckless.org/st
```

Usage tips (WIP)

Here is some advice for maintaining and using the system:

TODO

Overview

```
OS: Manjaro ARM Linux aarch64
Host: Raspberry Pi 400 Rev 1.0
Packages: 513 (pacman)
Shell: bash 5.1.8
Resolution: 1920x1080
WM: dwm
Theme: Adwaita [GTK3]
Icons: Adwaita [GTK3]
Terminal: st
CPU: BCM2835 (4) @ 2.000GHz
Memory: 222MiB / 3804MiB
```

TODO

- Make README more eye-catching
- Document more shortcuts and tips