

Arch Linux

Green = Command Line Code

Blue = Directory

Purple = Modifying Source Code

Installing Arch : This is easier with an ethernet connection if not type in `wifi-menu` to set up wifi connection. Once you have that and are in the root shell after boot you want to ping a website to ensure connectivity.

- 1.) You want to sync your clock with `timedatectl set-ntp true`
- 2.) Partitioning drives use `lsblk` to see connected drives lets say you want to configure the sda disk to have it so you will type `cfdisk /dev/sda` choose either GPT or DOS now. First partition to make is the boot partition you only need 128M if you are using GRUB. `With the partition selected hit b to set boot flag` you can set the other partition with the rest of the memory if you do not want a swap partition. You then want to WRITE changes and then QUIT.
- 3.) Formatting comes next with `mkfs.ext4 /dev/sda1` then `mkfs.ext4 /dev/sda2`
- 4.) Mounting the root partition with `mount /dev/sda2 /mnt` then create a directory there with `mkdir /mnt/boot` and mount boot partition with `mount /dev/sda1 /mnt/boot` use `lsblk` again to check work.
- 5.) Strapping your install with `pacstrap /mnt base base-devel linux linux-firmware vim`
- 6.) Generating a fstab file making sure to use `genfstab -U /mnt` this way it is linked to the drives unique identifier hex string instead of the folder path.
- 7.) Now to chroot into the install itself with `arch-chroot /mnt /bin/bash` changing from the usb drive boot media into arch install giving you access to pacman.
- 8.) Time to install a network manager and a boot loader mine will be GRUB to do so you do `pacman -S networkmanager grub`
- 9.) Now we want the system to start the network manager whenever we boot with `systemctl enable NetworkManager`
- 10.) Configuring GRUB with `grub-install /dev/sda` then to generate the configuration files with `grub-mkconfig -o /boot/grub/grub.cfg` if output does not say found linux image and initrd image go back and pacstrap on step 5
- 11.) Set root password with `passwd`

- 12.) Gen locale (selecting language) with `vim /etc/locale.gen` find the right language and uncomment the UTF and ISO and WRITE QUIT out of vim. Then generate with `locale-gen` set it in locale.conf with `vim /etc/locale.conf` and type `LANG=en-US.UTF-8` (or whatever language you choose) WRITE QUIT.
- 13.) Host name setup with `vim /etc/hostname` and name it what you want and WRITE QUIT.
- 14.) Set time zone with `ln -sf /usr/share/zoneinfo/America/New_York /etc/localtime`
- 15.) Exit chroot with `exit`
- 16.) Unmounting root and boot with `umount -R /mnt`
- 17.) Reboot with `reboot`

Installing DWM :

- 1.) Adding a user to the wheel group with `useradd -mg wheel josh` and set their password with `passwd josh`
- 2.) Give sudo access with `vim /etc/sudoers` and uncomment code under where it says members of group wheel to execute any command. Then WRITE QUIT.
- 3.) Getting xorg with `pacman -S xorg-server xorg-xinit libxinerama libxft`
- 4.) Cloning DWM with git clone <https://github.com/Jd200010/dwm>
- 5.) Cloning ST with git clone <https://github.com/MentalOutlaw/st>
- 6.) Cloning Dmenu with git clone <https://github.com/MentalOutlaw/dmenu>
- 7.) Change into each of those directories and perform `make clean install`
- 8.) Installing file manager with `pacman -S pcmanfm`
- 9.) Exit out of root with `exit` and login as your user
- 10.) In users home directory `touch .xinitrc` then `vim .xinitrc` and add `exec dwm` WRITE QUIT
- 11.) To start dwm just do `startx`
- 12.) *Optional for Intel systems if getting xorg server error trying to startx do* `sudo pacman xf86-video-intel`

3/10/22 (Downloading from AUR) : Downloaded Librewolf from Arch User Repository (AUR) with `git clone https://aur.archlinux.org/librewolf-bin.git` then moved into directory and used `makepkg -si` but saw I needed to validate the pgp key so I used `gpg --recv-key (librewolf pgp key)` then used `makepkg -si` again and finally used `sudo pacman -U` on the `.tar.zst` file it created

3/11/22 (Donwloading fonts) : Downloaded the Font Awesome font pack then unzipped it with `unzip` and put it in `/usr/share/fonts`

3/11/22 (Patching DWM) : From <https://dwm.suckless.org/patches/> I first went to the nextprev/ patch and saw the better implementation for it was shiftview.c so I downloaded the file. I then moved the file into the `/root/dwm` directory. I then used vim to open `config.h` where I scrolled just above `static Key keys[] = {` and inserted `#include "shiftview.c"`. I then went down into `static Key keys[]` and inserted

```
{ MODKEY, XK_x, shiftview, {.i = +1} },  
{ MODKEY, XK_z, shiftview, {.i = -1} },
```

This patch allows me to change my focused window with MODKEY which is alt in dwm and x or z.

3/27/2022 (slstatus) : cloned slstatus to root directory with `git clone https://git.suckless.org/slstatus` I then did `make clean install` after doing so I then vimed into `config.h` and made configs to let me see network traffic, CPU, RAM and date and time after that I went to my `.xinitrc` in the home directory and added `slstatus &` at the top above `exec dwm` to start slstatus each time I `startx`.