

Updated
for Raspbian
Stretch

Getting Started



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Choosing an OS

Wait... there's more than one?

Linux Distributions



Raspberry Pi Distributions



<https://www.raspberrypi.org/downloads>

NOOBS (New Out-Of-Box Software)

Other distributions available as “image” files

Raspbian

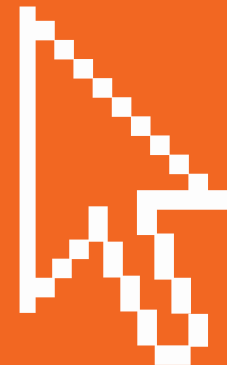
Download Raspbian

Current Raspbian Image
www.raspberrypi.org/downloads



Downloading Raspbian

www.raspberrypi.org/downloads



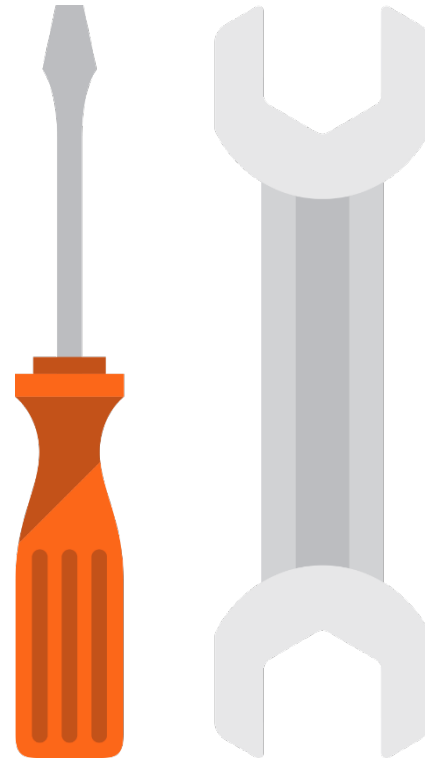
Create the SD Card

Mac/Linux

```
dd bs=4M if=xxx.img of =/dev/yyy
```

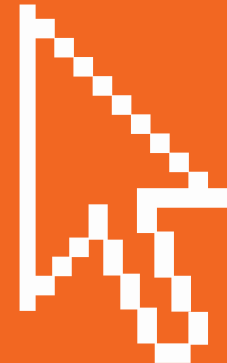
Windows

<http://sourceforge.net/projects/win32diskimager/>

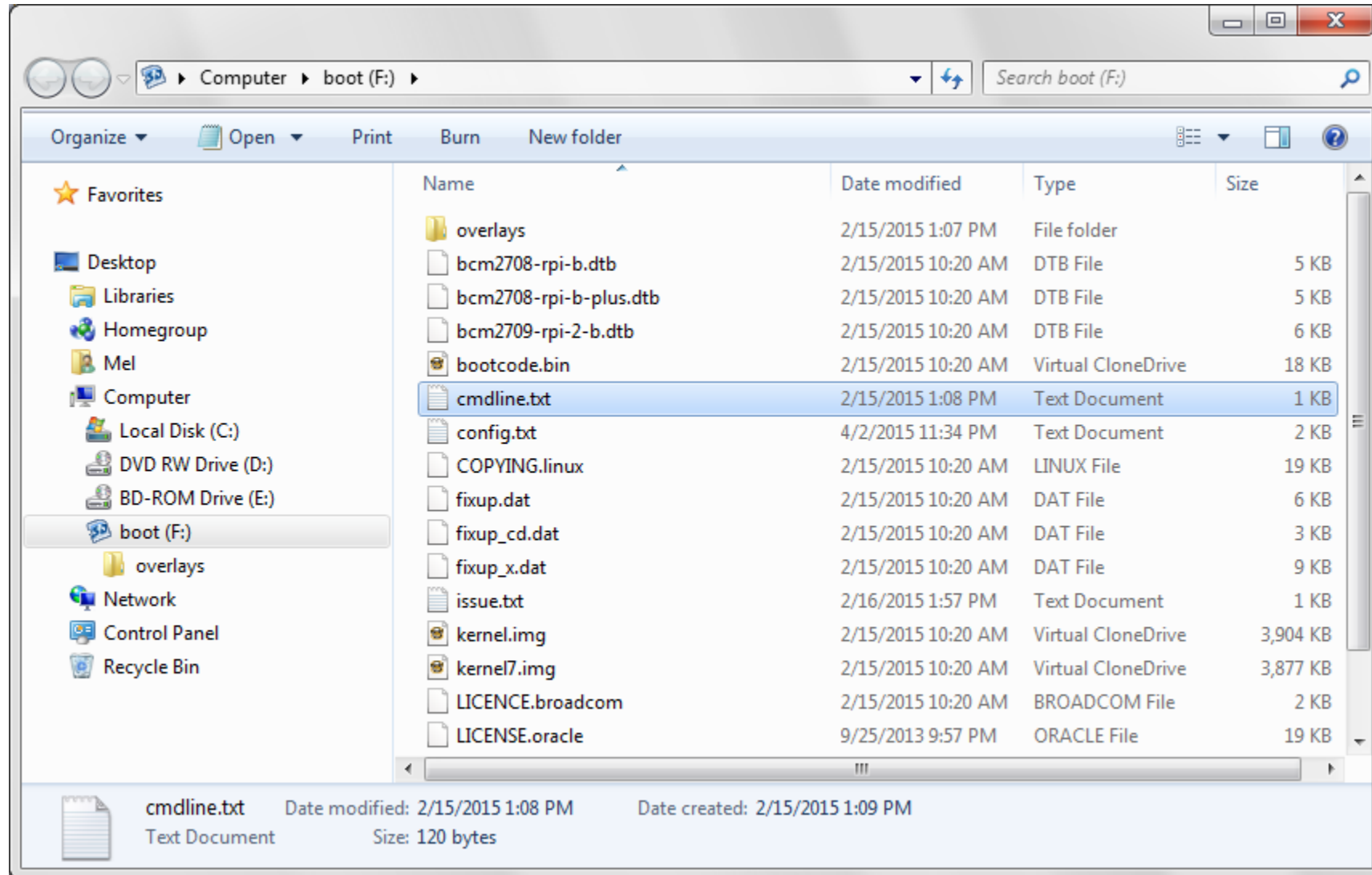


Creating the SD Card

Writing the OS image with
Win32DiskImager



SD Card Contents



Hooking It All Up

Pi / Case (optional)

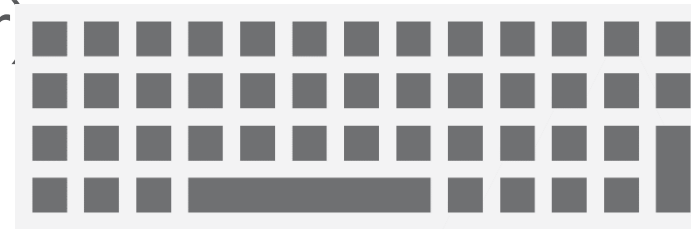
SD card

Monitor

Keyboard / mouse

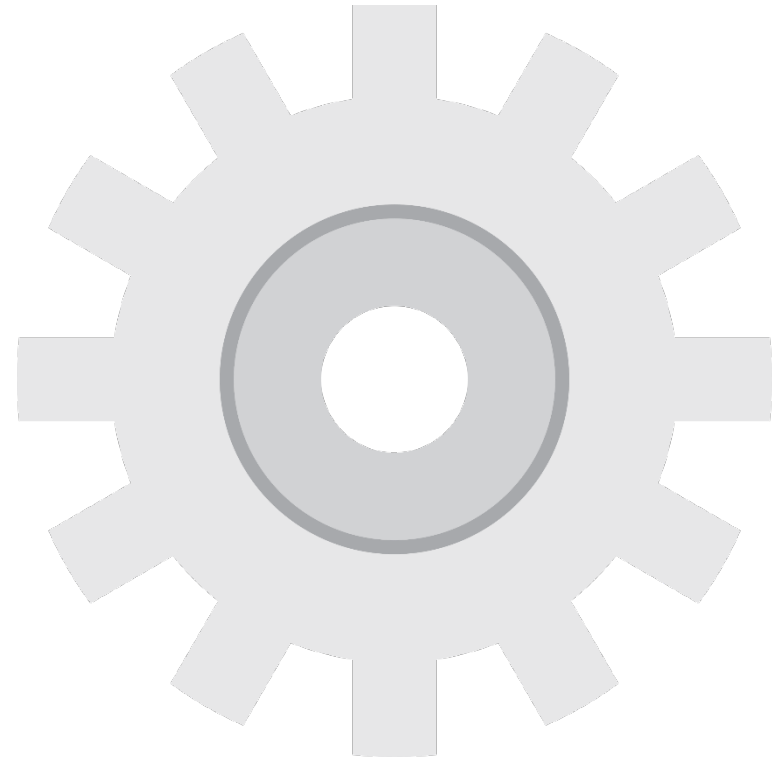
Network cable (or wireless adapter)

Power supply



First-Run Configuration

Filesystem resized
Automatic reboot



First-Run Configuration

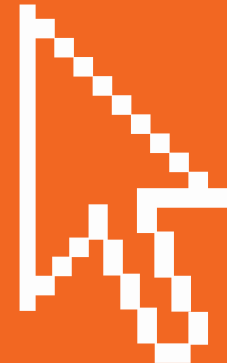
Expanding the filesystem

Naming the Raspberry Pi

Changing the default password

Setting Localization Options

Overclocking



A Quick Tour

"Bash"

command line shell
(Bourne Again SHell)

"list" command (ls)

view directory
contents

"cd ~"

takes you to your
home directory
(/home/pi)

"pwd"

shows you where
you are

Text editors

nano, vim, LeafPad

Pixel Desktop

Tour



Elevated Privileges

Windows

- Try to run a command
- UAC prompt
- You click "Yes"
- Success

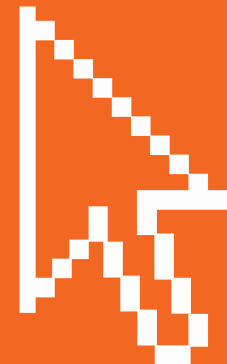
Linux

- Try to run a command
- Fail
- Run same command through sudo
- Success

sudo

Substitute User Do – Runs programs as if you were someone else, typically the administrative “root” user. Think of it like “Run as Administrator”

Tour



Update Software Packages

Advanced Packaging Tool (APT)

Installs, updates, and removes software packages

`apt-get update`

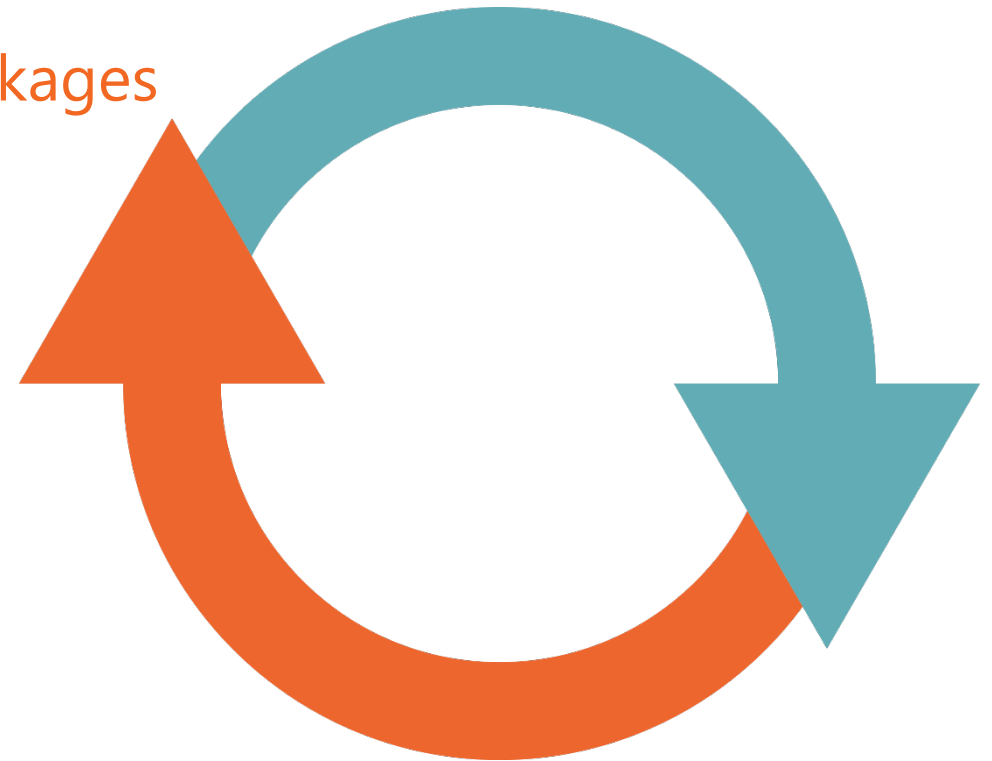
Update list of current packages

`apt-get upgrade`

Upgrade out of date packages

Make a backup

"Read" the SD card with Win32 Disk Imager



Make A Backup

Windows

Win32DiskImager

Mac / Linux

```
sudo dd if=/dev/diskn of=~/.pi.img bs=1m
```



Back Up



[illegible]