

Imaging SD Cards for the Raspberry Pi

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Materials

1. Computer or Laptop with SD Card Reader
2. SD Card (Capacity of 8GB is recommended)

(for a list of compatible cards see http://elinux.org/RPi_SD_cards)

Getting a Disk Image

Several Linux distributions provide images for use with RaspberryPi and can be downloaded from the web.

A disk image with all the software needed for use with Wind-for-Schools can be obtained from your local WAC. (Currently available from Kansas State University at <http://wind.ece.ksu.edu/rpi-images/>)

Download the latest disk image and unzip the file if necessary.

Imaging the SD Card

Insert the SD Card into the computer.

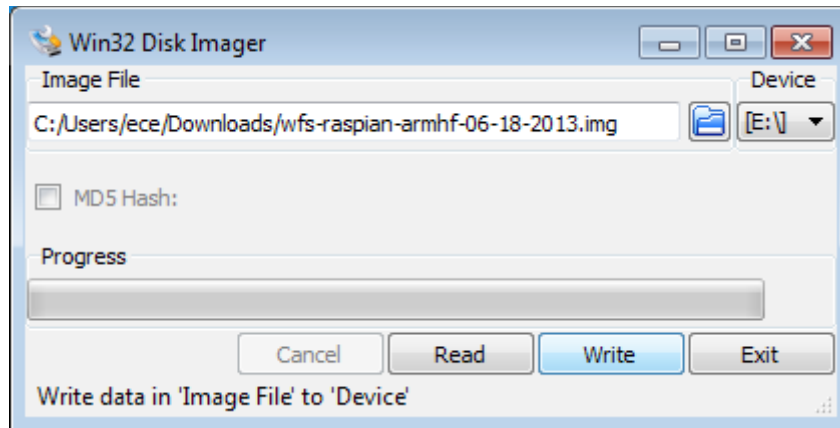
Follow the instructions for your operating system. Once complete the SD Card will be ready for use with your RaspberryPi.

From Windows

A graphical tool for Windows is available for imaging SD Cards called Win32 Disk Imager, available here: <http://sourceforge.net/projects/win32diskimager/>

1. Unzip the program folder and launch win32disk imager.
2. Click the folder icon and select the image file.
3. Select the drive letter of your SD Card reader.
4. Click the 'Write' button. Click 'Yes' to the Confirm Overwrite prompt.

Once finished, the SD Card is ready to be used with your Raspberry Pi.



From Linux/Unix

There are many graphical tools for creating/restoring disk images. 'gnome-disk-utility' or 'gdiskdump'

These instructions are for imaging the device from a terminal command line.

Some commands will require you to run as root user or with the 'sudo' prefix.

1. Locate the SD cards' device path. `dmesg | grep disk` will show information about available drives on the system. SD Card readers and similar devices will show as being removable disks.

In this example '/dev/sdb' will be the location of the SD Card reader.

2. Ensure the device is not mounted. `umount /dev/sdb`
3. For Linux/Unix environments use a tool like 'dd' to write the image to the SD card.

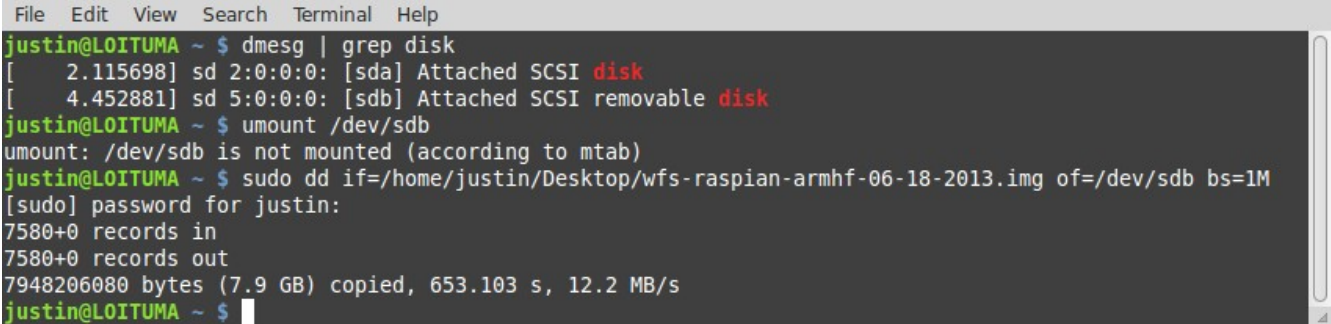
```
dd if=/path/to/image/file.img of=/dev/sdb bs=1M
```

Replace '/path/to/image/file.img' with the path to the image file you downloaded.

Replace 'sdb' with your device location.

This process can take several minutes to image the SD Card.

Once complete, the imaged SD card is ready to use.



```
File Edit View Search Terminal Help
justin@LOITUMA ~ $ dmesg | grep disk
[  2.115698] sd 2:0:0:0: [sda] Attached SCSI disk
[  4.452881] sd 5:0:0:0: [sdb] Attached SCSI removable disk
justin@LOITUMA ~ $ umount /dev/sdb
umount: /dev/sdb is not mounted (according to mtab)
justin@LOITUMA ~ $ sudo dd if=/home/justin/Desktop/wfs-raspian-armhf-06-18-2013.img of=/dev/sdb bs=1M
[sudo] password for justin:
7580+0 records in
7580+0 records out
7948206080 bytes (7.9 GB) copied, 653.103 s, 12.2 MB/s
justin@LOITUMA ~ $
```