

FlashCard Guide

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1 Introduction

This Guide will show you how to remove partitions from a flashcard, burn a flashfile onto the flashcard, and set up the database and permissions for the flashcard.

After connecting the flashcard, run "dmesg" command in terminal. This shows the location of the flashcard e.g. *[sdc] 1000944 512-byte logical blocks: (512 MB/489 MiB)* . The correct path for the flashcard will be: */dev/sdc*. If the flashcard has multiple partitions, you can access it by adding the number of the partition to *sdc*, so the path of partition 2 would be: */dev/sdc2*.

2 Formatting and imaging

If the flashcard isn't empty, start by copying the contents to a flashfile image with this command:

```
dd if=/dev/sdX of={your location}/flashfil
```

After this you can format the card with fdisk command:

```
fdisk /dev/sdX
*** type d ***
*** type the partition number you want to delete ***
*** type d again and repeat ***
```

Now we want to burn the flashfile image from the github onto the flashcard. This is done by the dd command:

```
dd if={github location}/flashfil of=/dev/sdX
```

This operation may take some time.

3 Mounting flashcard

Before mounting and editing the flashcards content, make sure you have a folder called */mnt/cf*. This should be your mounting point, you will need to mount partition 2:

```
sudo mount /dev/sdX2 /mnt/cf
```

Now you can access the contents in the folders */mnt/cf*.

4 Replacing database

Now you need to replace the database on the flashcard, with the one you work with. Go to the mounting point:

```
cd /mnt/cf
```

Remove the previous database from the flashcard:

```
sudo rm -r database
```

copy the database you are working with:

```
sudo cp -r /{location of your database} /mnt/cf
```

before editing you need to confirm the permissions of the contents in */mnt/cf*:

```
ls -l /mnt/cf
```

It should look like figure 1. But the ownership of database would be yours.

```

totalt 11561
drw-rw-rw-  3 500 root      1024 nov 29  2007 data
drw-rw-rw- 16 500 root      1024 maj  6 14:49 database
drw-rw-rw-  5 500 root      1024 nov 29  2007 extras
drw-rw-rw-  2 500 root      1024 nov 29  2007 lost+found
-rwxr-xr--  1 500 root         31 feb 19  2018 mntdatabase.txt
-rwxr-xr-x  1 500 root 11785176 maj  8  2015 robostacker
-rwxrwxrwx-  1 500 root      199 maj  6 13:38 startup

```

Figure 1: ls -l of /mnt/cf

Now you have to change the permissions of the database with chown:

```
sudo chown -R 500:root database
```

Lastly you need to edit *mntdatabase.txt* for it to run your system.

5 Unmounting the falshcard

For unmounting you have to close all documents related to the card, and change directory in the terminal with `cd` command. Now use `umount` to unmount the flashcard:

```
sudo umount /mnt/cf
```

Go to your folder manager and eject the flashcard. You can now remove the flashcard.

6 Touch screen calibration

For the big panel pc the touch port is *touchport=/dev/ttyS2* and *ttyS3* for the small. This is changed in the *system.ini* file in the database. To calibrate the touch screen, the value *touch.initialized* need to be set to 0.

NOTICE!! If you haven't changed the *touchport* value in *system.ini* then you don't need to calibrate.

Now when you turn on the panel pc it will start with a calibration screen, unfortunately you have too be a bit fast to calibrate the screen. Just follow the instructions on the screen and it will calibrate.