Locus Map on SD card

Preliminary information

In the beginning, Locus Map was designed to work with SDcard as external storage space for all data related to the application - downloaded SQLite maps, point databases, SRTM data etc. All worked flawlessly until Android OS version 4.4.2. came on stage. It brought redefined conditions of SD card reading/writing permissions:

1. **disabled random reading** of any place in a file stored on SD card (solved in Android 5 and Locus 3.11. for SRTM, vector maps and backup files, see below)
2. **disabled random writing** at any place in a file stored on SD card. Without this any database is useless and that is why it is not possible to have your tracks, points, online maps being downloaded, online maps cache and lots of other DTB-related files on the SD card

Who is involved

- Only devices with SD card.
- The issue does not occur on devices with custom ROM until Android 6

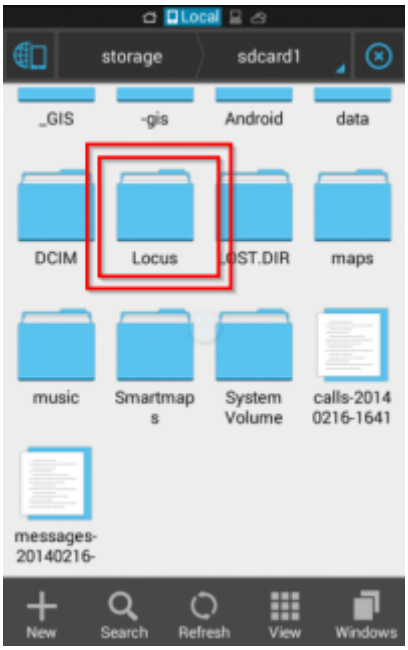
For more information please see:

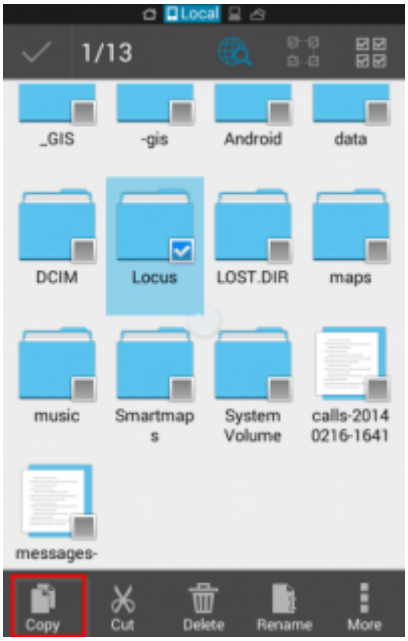
- www.chainfire.eu
- www.gottabemobile.com
- www.mobiflip.de (Deutsch)

Android 4.4.2. options

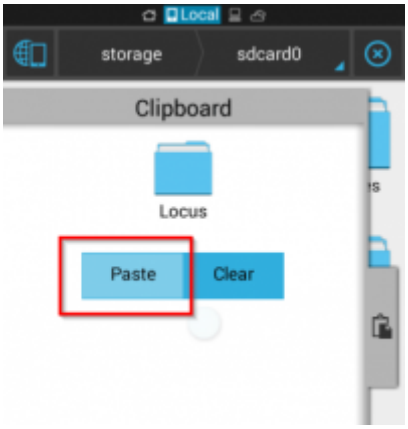
A. Move Locus to the internal storage

- Install arbitrary Android file manager – for example ES File Explorer
- Open it and go to your external SD card (often marked as sdcard1)
- Long tap on Locus folder and choose Copy

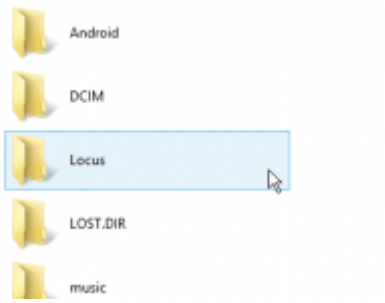




- Copy whole Locus folder to the internal storage
- Navigate to the internal memory (often marked as sdcard0) and Paste Locus folder



- Paste Locus folder on internal storage
- Check that process was successful and you can see all Locus data on internal storage
- Pull out the external SDcard from phone and connect it to your notebook or desktop computer



- Rename Locus folder on SDcard
- Remove (or rename for safety) Locus folder on external SDcard. The goal is to have only one folder Locus that is located on internal storage

Your downloaded maps and other personal offline maps from other sources can be kept on SD card and defined as External maps in Locus.

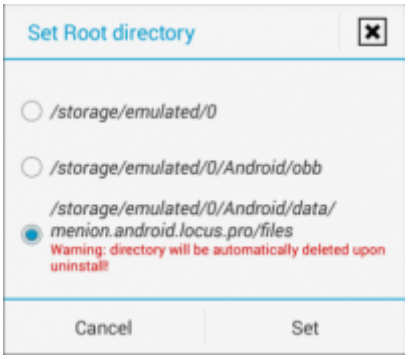
B. Move Locus and maps into a package-specific directory on SD card

Every app on Android has its own special folder on SDcard which is writable only for this app. So it seems like the best solution how to place map on SD card on KitKat. But Locus (in default) does not use it because there are two main weaknesses:

- All content of this folder will be automatically deleted when you uninstall Locus. So all your maps will be deleted when you decide to uninstall Locus app
- Locus Free and Locus Pro can not share data because every app has separate folder

Anyway if you decide to use it follow these steps:

- Open Locus > Menu > Settings >Miscellaneous > Set Root directory
- Select path which contains “menion.android.locus” or “menion.android.locus.pro”



- Connect SD card to the PC and move whole “Locus” folder to the directory defined in previous step
- Start Locus

C. Store your maps on external SD card

Locus offline raster maps can be stored (not downloaded into) in external directory on SD card. Please follow steps bellow:

- Connect card to the PC and create arbitrary folder on the SDcard for your maps e.q. MyLocusExternMaps
- Move maps from folder Locus/maps to the folder MyLocusExternMaps
- Move folder Locus from SDcard to the internal memory (without map files)
- Start Locus (choose internal folder)
- Open Menu > Maps > Tap on blue “PLUS” button in OFfline tab > select External maps > navigate to MyLocusExternMap folder and tap the “checkmark” in top panel

The result is that the Locus working directory will be placed on internal memory and all maps will be located in external folder on SDcard. This issue is also described in article: Saving offline maps on SD-card under Android 4.4 (KitKat) >>

D. Use rooted devices

- In case that your device is rooted you can fix it by editing the system configuration
- Install application SDFix and perform the system changes
- After that simply start Locus

Another option for rooted devices is to format your SD card in FAT32 system in your PC. That eliminates the file system rights. If you use a SD card larger than 64 GB you need a tool like H2format for Windows to format the SD card with FAT32. Be aware that this does not support files larger than 4 GB.



Beginning with Android 6 not even rooted devices can acquire the full access to SD card.

Android 5.0+

Android 5.0 partially loosens strict permissions of applications writing on SD cards stated in Android 4.4.2. It is possible to move **vector maps, SRTM data and backups on SD card**. All other Locus folders must remain in the internal memory, it is not possible to run them on SD card without issues.

Works since Locus Map 3.11.0

If you have a device with SD card and want to save some storage space, follow these instructions:

- go to Menu > Settings > Miscellaneous > Default directories
- set new location of Locus/mapsVector, Locus/backup and Locus/data/srtm directories on SD card
- move contents of the folders to the new location and delete original folders

- restart Locus Map



If you had set these directories earlier in 3.10.x versions or older, it is necessary to perform the setting once again as the new Locus Map needs a new permission to write on SD card from the operation system. **Otherwise the SD directories will not be activated!**

Android 6

Beginning with Android 6 **not even rooted devices can acquire the full access to SD card.** All other options are the same as in Android 5+.

From:
http://docs.locusmap.eu/ - **Locus Map Classic - knowledge base**

Permanent link:
http://docs.locusmap.eu/doku.php?id=manual:faq:use_sdcard_on_kitkat&rev=1470223863

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