

Corrupted SQLite Database Repair

SQLite databases on Android devices are very stable by definition. However, we have experienced that databases can be corrupted. This may be due to wrong closing the database or killing Locus app. The result is that Locus Map is not able to open the database file or the file deletes itself - **this concerns both map files and points/track databases, all are SQLites**. Luckily sometimes it is possible to repair such a corrupted database.

How to

Quick solution for MS Win users

This procedure concerns corrupted 'tracks.db' file that you can find in your Locus directory *Locus/data/database*:

1. Download [this .ZIP file](#) and unpack it
2. Copy tracks.db to the unpacked directory
3. Rename tracks.db to tracks_old.db
4. Run **fix_tracks.bat**

General solution

Following steps require working with the DOS command line (cmd).

- Copy corrupted map file (or other sqlite database) from your device to PC
- Download sqlite-tools from <http://www.sqlite.org/download.html>
- Unpack it and place corrupted database file into the same directory as sqlite3.exe
- Start "cmd" and navigate to the directory with the corrupted file
- Run

```
>sqlite3.exe filename.db "PRAGMA integrity_check"
```

to verify database. Result will be probably error message Error: database disk is malformed.

- Run

```
>sqlite3 filename.db ".dump" | sqlite3 new.db
```

- If you repeat above integrity check on a new.db file, you should get "OK" message.
- Rename new.db file to the original name of your file and copy it to its original place (i.e. copy fixed tracks.db or waypoints.db to Locus/data/database folder)

For example:

```
c:\menion\software\SQLite tools>sqlite3.exe tracks.db "PRAGMA integrity_check"  
*** in database main ***  
Fragmentation of 1904 bytes reported as 0 on page 892  
On page 584 at right child: Rowid 170781 out of order  
Page 896: btreeInitPage() returns error code 11  
Page 894: btreeInitPage() returns error code 11  
Page 893: btreeInitPage() returns error code 11  
Page 895: btreeInitPage() returns error code 11  
Error: database disk image is malformed  
  
c:\menion\software\SQLite tools>sqlite3.exe tracks.db ".dump" | sqlite3 new.db  
Error: near line 24: no such column: Inf  
Error: near line 25: no such column: Inf  
Error: near line 26: no such column: Inf  
Error: near line 27: no such column: Inf  
Error: near line 28: no such column: Inf  
Error: near line 29: no such column: Inf  
Error: near line 65580: UNIQUE constraint failed: locations._id  
Error: near line 65581: UNIQUE constraint failed: locations._id  
Error: near line 65582: UNIQUE constraint failed: locations._id  
Error: near line 65583: UNIQUE constraint failed: locations._id  
Error: near line 65584: UNIQUE constraint failed: locations._id  
Error: near line 65585: UNIQUE constraint failed: locations._id  
Error: near line 65586: UNIQUE constraint failed: locations._id  
Error: near line 65587: UNIQUE constraint failed: locations._id  
Error: near line 65588: UNIQUE constraint failed: locations._id  
Error: near line 65589: UNIQUE constraint failed: locations._id  
Error: near line 65590: UNIQUE constraint failed: locations._id  
Error: near line 65591: UNIQUE constraint failed: locations._id  
Error: near line 65592: UNIQUE constraint failed: locations._id  
Error: near line 65593: UNIQUE constraint failed: locations._id  
Error: near line 65594: UNIQUE constraint failed: locations._id  
Error: near line 65595: UNIQUE constraint failed: locations._id  
Error: near line 65596: UNIQUE constraint failed: locations._id  
Error: near line 65597: UNIQUE constraint failed: locations._id  
Error: near line 65598: UNIQUE constraint failed: locations._id  
Error: near line 65599: UNIQUE constraint failed: locations._id  
Error: near line 65600: UNIQUE constraint failed: locations._id  
Error: near line 65601: UNIQUE constraint failed: locations._id  
Error: near line 65602: UNIQUE constraint failed: locations._id  
Error: near line 65603: UNIQUE constraint failed: locations._id  
Error: near line 65604: UNIQUE constraint failed: locations._id  
Error: near line 65605: UNIQUE constraint failed: locations._id  
Error: near line 65606: UNIQUE constraint failed: locations._id  
  
c:\menion\software\SQLite tools>sqlite3.exe new.db "PRAGMA integrity_check"  
ok
```



However, this procedure is not always successful. The easiest and most reliable way is to restore the database file from the backup.

From:
<https://docs.locusmap.eu/> - **Locus Map Classic - knowledge base**

Permanent link:
https://docs.locusmap.eu/doku.php?id=manual:advanced:map_tools:corrupted_sqlite&rev=1500978556

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