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title: Accessing messages in the database

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# Accessing messages in the database

## Decrypting databases

In order to view database data you need to decrypt it first. Install `sqlcipher` using your favorite package manager and run the following commands in the directory with databases: ````bash sqlcipher files_chat.db pragma key="youDecryptionPassphrase";`

## Ensure it works fine

```
select * from users; ```
```

If you see `Parse error: no such table: users`, make sure you entered correct passphrase, and you have changed passphrase from random in Android app (if you got this database from Android device, of course).

## SQL queries

You can run queries against `direct_messages`, `group_messages` and `all_messages` (or their simpler alternatives `direct_messages_plain`, `group_messages_plain` and `all_messages_plain`), for example:

```
```sql -- you can put these or your preferred settings into ~/.sqliterc -- to persist across sqlite3 client sessions .mode column .headers on .nullvalue NULL
```

```
-- simple views into direct, group and allmessages -- with user's messages deduplicated for group and allmessages; -- only 'x.msg.new' ("new message") chat events - filters out service events; -- msgsent is 0 for received, 1 for sent select * from directmessagesplain; select * from groupmessagesplain; select * from allmessages_plain;
```

```
-- query other details of your chat history with regular SQL, for example: -- files you offered for sending select * from directmessages where msgsent = 1 and chatmsgsevent = 'x.file'; -- everything catherine sent related to cats select * from directmessages where msgsent = 0 and contact = 'catherine'
```

```
and msgbody like '%cats%'; -- all correspondence with alice in #team select
* from groupmessages where group_name = 'team' and contact = 'alice';
```

```
-- aggregate your chat data select contactorgroup, nummessages from (
select contact as contactorgroup, count(1) as nummessages from
directmessagesplain group by contact union select groupname as
contactorgroup, count(1) as nummessages from groupmessagesplain group
by groupname ) order by nummessages desc; ````
```