

# Intro

After Upgrading my mobile from SailfishOS 3.3.??? to 4.1.??? it figured out, that I've missed a backup with the OS tools. I've had only a backup of the filesystem. Restoring most of the relevant information was simple. So it was no problem to get my Phonecalls, Messages and also Notes back. Only two things didn't work. Contacts and Calendar. Although I can ignore my Calendar for the moment, also my contacts went away due to the fact, that there was a DB Schema change.

Luckily it was possible to start an emulator with OS 3.2.??? and restore the contacts within that emulator \*but\*, all tries to restore the data with Backuptools on that emulator or CalDav syncing or vcardconverter on OS level failed. For whatever reason it was not possible to restore that data.

# Solution










My Solution here is to restore the data with a python script, exporting it from the Sqlite database to .vcf (vCard File).






**This only works for DB Structures of SailfishOS and was especially tested with DBs of OS version 3.2.X and 3.3.X**



**Version 0.4 is the latest one.**

# Implementation

function	implemented
Full Name	
First Name	
Last Name	
voice number	
fax number	
sms number	
e-mail addresses	
Organization name	
Organization parameters	

function	implemented
picture / foto	
address	
birthday	
URL	
Notes	

## Requirements

Install following Python Modules from PyPi

- vObject

## execution Notes

### Help

```
$ ./ContactRestore.py --help
usage: ContactRestore.py [-h] --db DB --output OUTPUT [--avatars
AVATARS] [--debug] [--version]
```

Restore SailfishOS 3 Contacts

optional arguments:

```
-h, --help            show this help message and exit
--db DB, -d DB        Sqlite3 Database file usually
/home/{nemo,defaultuser}/.local/share/system/Contacts/qtcontacts-
sqlite/contacts.db
--output OUTPUT, -o OUTPUT
                        Output directory for vcf files
--avatars AVATARS, -a AVATARS
                        Avatar directory. If present otherwise we skip
this block of avatars, means, no
                        avatars at all
--debug               debugging output to identify problems
--version              show program's version number and exit
```

This script was written to restore SailfishOS 3 contacts as VCF files.  
To see additional information,  
visit:  
[https://wiki.siningsoft.de/doku.php?id=sailfishos:projects:sailfish\\_contacts\\_rescue](https://wiki.siningsoft.de/doku.php?id=sailfishos:projects:sailfish_contacts_rescue)

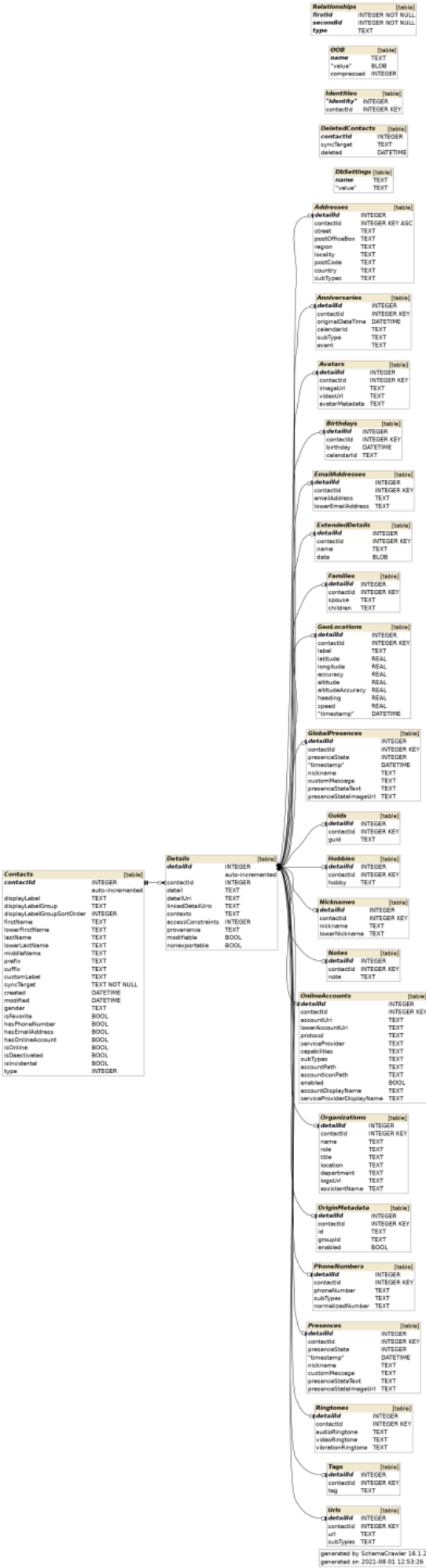
## Execution

```
$ ./ContactRestore.py -d Testdata/contacts_with-Phone-Mobile-Fax-Pager-
Assistent-Addresses.db -o Testdata/Output/
exporting SiSo Emulator to file Testdata/Output//SiSo_Emulator.vcf
exporting TestUserFirstName TestUserLastName to file
Testdata/Output//TestUserFirstName_TestUserLastName.vcf
exporting 2nd Test *FN* User *LN* to file
Testdata/Output//2nd_Test_*FN*_User_*LN*.vcf
exporting Phone Test to file Testdata/Output//Phone_Test.vcf
exporting Ludowig Adressuser to file
Testdata/Output//Ludowig_Adressuser.vcf
```

# Database

## Schema





# table descriptions

## Addresses

### subTypes

The database is missing a table with subTypes to identify entries in Addresses. To have a reference, here is a list of Types

subType	vCard/vobject parameter	SailfishOS Contact label
Null	personal	Personal Address
0		parcel
1	cell	Cell Phone
2	fax	Fax
3	pager	Pager
6	video	Video
10	??	Assistent

## PhoneNumbers

The Phonenumberes are listed in table **PhoneNumbers** with details from table **Details**. Most interesting here is the type of number. Which is stored in table **PhoneNumbers** column **subTypes**.

Here is an example:

detailId	contactId	phoneNumber	subTypes	normalizedNumber	detailId	contactId	detail	detailUri	linkedDetailUri	contexts	accessConstraints	provenance	modifiable	nonexportable
10	3	01719994445	1	19994445	10	3	PhoneNumber	NULL	NULL	Home	0	NULL	NULL	NULL
11	3	040111222334	NULL	11222334	11	3	PhoneNumber	NULL	NULL	Home	0	NULL	NULL	NULL
12	3	01720004443	1	20004443	12	3	PhoneNumber	NULL	NULL	Work	0	NULL	NULL	NULL
13	3	040111222333	NULL	11222333	13	3	PhoneNumber	NULL	NULL	Work	0	NULL	NULL	NULL
14	3	040111222335	2	11222335	14	3	PhoneNumber	NULL	NULL	Work	0	NULL	NULL	NULL

### subTypes

The database is missing a table with subTypes to identify entries in PhoneNumbers for example. To have a reference, here is a list of Types

subType	vCard/vobject parameter	SailfishOS Contact label
Null	voice	Voice Phone
1	cell	Cell Phone
2	fax	Fax
3	pager	Pager
6	video	Video
10	??	Assistent

Definition from RFC:

```

+-----+-----+
-----+
| Value      | Description
|
+-----+-----+
-----+
| text       | Indicates that the telephone
number supports text      |
|           | messages (SMS).
|
| voice      | Indicates a voice telephone
number.
| fax        | Indicates a facsimile
telephone number.
| cell       | Indicates a cellular or mobile
telephone number.
| video      | Indicates a video conferencing
telephone number.
| pager      | Indicates a paging device
telephone number.
| textphone  | Indicates a telecommunication
device for people with   |
|           | hearing or speech
difficulties.
+-----+-----+
-----+

```

The default type is "voice".

## VCARD

Although it wasn't specified by python vobject lets assume we've to use VCard specification by RFC6350.

## external Links

- great Fileformat description: <https://de.wikipedia.org/wiki/VCard>
- FileFormatdescription: <https://docs.fileformat.com/email/vcf/#vcf-30-example>
- Python vobject: <http://eventable.github.io/vobject/>
- vobject Code documentation: <http://vobject.skyhouseconsulting.com/epydoc/>
- <https://datatracker.ietf.org/doc/html/rfc6350>

# ToDo

1. fotos
2. birthday
3. missing parameters for names
4. URL with parameters

## source

The sourcecode is located under `svn://svn.siningsoft.de/Sailfish_Contacts_Restore`. A free read access via svn will follow. If you're interested in submitting code as part of the development, a read/write access could be requested via [sailfish@siningsoft.de](mailto:sailfish@siningsoft.de)

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