

Workaround solution for in-place, on-the-fly DECRYPTION of a Truecrypt non-system volume

by [wex\[hr\]](#) » 08 Nov 2011, 09:37. Originally published at <http://eileenslounge.com/viewtopic.php?p=64350&sid=52ead59ce75b5edfac2284a4edb3d370#p64350>
[Note (brozkeff.net): USE THIS MANUAL AT YOUR OWN RISK – NO WARRANTY :-)]

Hi!

I managed to get workaround solution for in-place, on-the-fly DECRYPTION! You can decrypt SYSTEM encrypted volumes in place, but can't other non-system data partitions as it says in Truecrypt's manual. It was funny to me because it is an amazing piece of software (because of recent hardware acceleration support 😊) but that thing is a major flaw. I'm just like you ("since about the year 1734..." -> I think that way I can travel thru time 😊) so copying files instead of cloning partition is not acceptable.

I used Linux (if Truecrypt is amazing, Linux is godlike 🤖) to get this workaround:

1. mount volume/partition (with "**fdisk -lu**" determine which disk is your target) that you want to decrypt in-place using header backup of truecrypt volume (this is not necessary but in means of precautions, it's good idea) by typing in terminal/console:

Code: [Select all](#)
`truecrypt --mount /dev/sdb2 -m=headerbak`

2. type in terminal to see name of newly mounted device (it's something like '/dev/mapper/truecrypt1'):

Code: [Select all](#)
`df -h`

3. clone that virtually decrypted device to same partition from which it is read (yes!, this is not mistake and I guarantee that you will not lose any data; I tried this many times):

Code: [Select all](#)
`dd if=/dev/mapper/truecrypt1 of=/dev/sdb2 conv=noerror,notrunc`

4. when cloning of those gibibytes is over, you must readdress "new" partition (subtract 512 sectors, now not used by 256kiB of truecrypt's header+backup_of_header) with **parted** utility

EXAMPLE:

Partition editing device HDD #2 where used to be encrypted partition:

Code: [Select all](#)
`parted /dev/sdb`

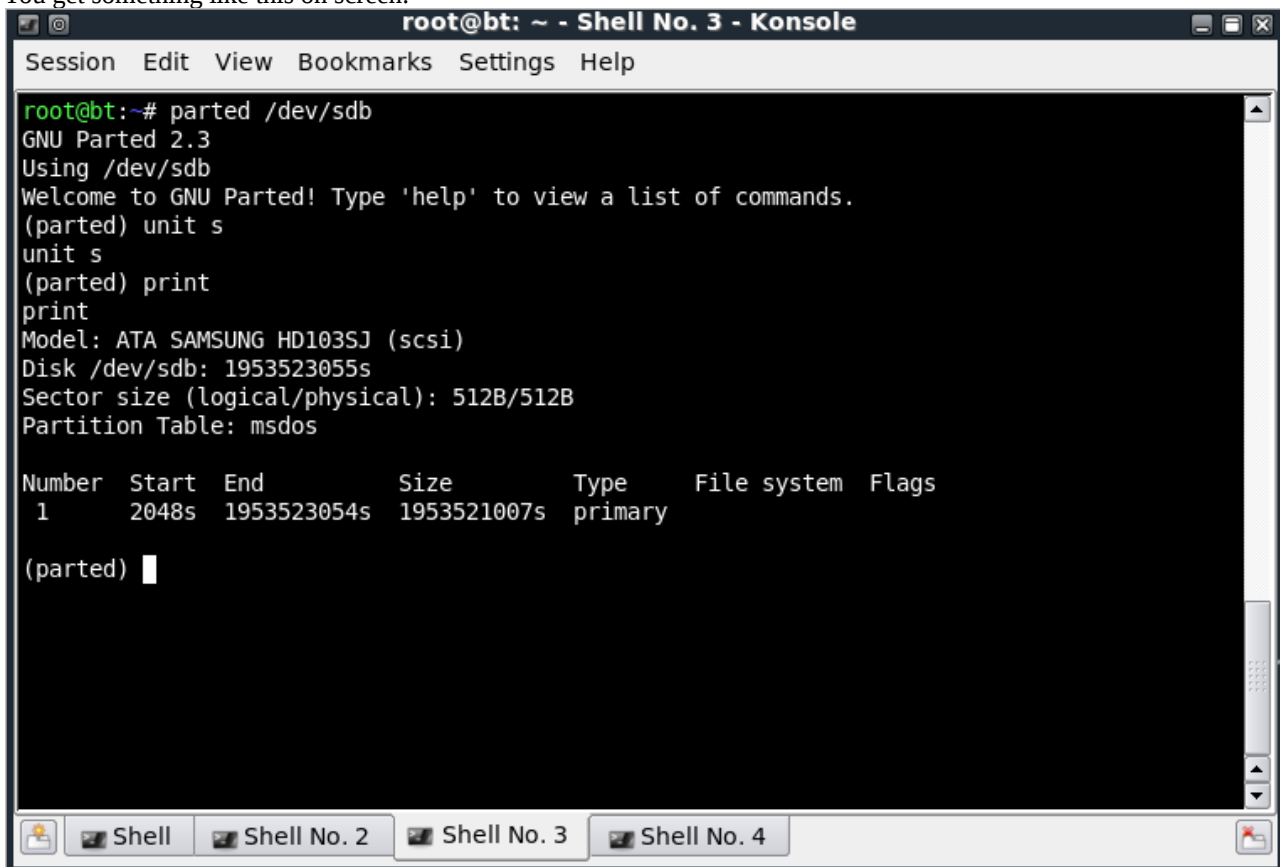
Use sectors as units to view start;end;size of partitions:

Code: [Select all](#)
`unit s`

List partitions to screen:

Code: [Select all](#)
`print`

You get something like this on screen:



```
root@bt:~# parted /dev/sdb
GNU Parted 2.3
Using /dev/sdb
Welcome to GNU Parted! Type 'help' to view a list of commands.
(parted) unit s
unit s
(parted) print
print
Model: ATA SAMSUNG HD103SJ (scsi)
Disk /dev/sdb: 1953523055s
Sector size (logical/physical): 512B/512B
Partition Table: msdos

Number  Start  End              Size              Type      File system  Flags
  1      2048s  1953523054s     1953521007s      primary

(parted) 
```

before readdress

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Then, taking actions, delete that partition (only in MBR table, not erasing/filling with zeroes!); making new partition NTFS (or FAT32 or whatever your OS/Windowz is able to see/recognize) on same place where was old partition just make end sectors OLDVALUE-512

Code: [Select all](#)

```
rm 1
```

Code: [Select all](#)

```
mkpart
p
ntfs
2048
1953522542
```

Then again check if everything is ok, start;end-512;size-512

Code: [Select all](#)

```
print
```

```
root@bt: ~ - Shell No. 4 - Konsole
Session Edit View Bookmarks Settings Help

unit s
(parted) rm 1
rm 1
(parted) mkpart
mkpart
Partition type? primary/extended? p
p
File system type? [ext2]? ntfs
ntfs
Start? 2048
2048
End? 1953522542
1953522542
(parted) print
print
Model: ATA SAMSUNG HD103SJ (scsi)
Disk /dev/sdb: 1953523055s
Sector size (logical/physical): 512B/512B
Partition Table: msdos

Number  Start  End              Size          Type          File system  Flags
  1      2048s  1953522542s     1953520495s   primary

(parted) █
```

after readdress

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5. Try to boot in windowz and make disk check.