

I have been backing up whole disk image from Eee PC, and mounting it using loop file system to access partition in it. However, I have problems with GNU fdisk which reports 4Gb image as:

```
Disk /backup/eee/hda: 3 GB, 3997486080 bytes
255 heads, 63 sectors/track, 486 cylinders, total 7807590 sectors
Units = sectors of 1 * 512 = 512 bytes
```

Device	Boot	Start	End	Blocks	Id	System
/backup/eee/hda1	63	4803435	2409718	83	Linux	
/backup/eee/hda2	4819563	7759395	1469947	83	Linux	
/backup/eee/hda3	7775523	7775460	0	c	FAT32 LBA	
/backup/eee/hda4	7791588	7791525	0	ef	EFI FAT	

For a start, disk size is wrong:

```
$ ls -al hda
-rwxrwxrwx 1 dpavlin root 4001292288 2008-01-20 00:59 hda
```

And then, even more wrong, offsets of partition seem to be wrong. When same image is examined using fdisk from util-linux, sectors are reported like this:

```
Disk hda: 0 MB, 0 bytes
255 heads, 63 sectors/track, 0 cylinders, total 0 sectors
Units = sectors of 1 * 512 = 512 bytes
Disk identifier: 0x332b332a
```

Device	Boot	Start	End	Blocks	Id	System
hda1	63	4819499	2409718+	83	Linux	
hda2	4819500	7775459	1477980	83	Linux	
hda3	7775460	7791524	8032+	c	W95 FAT32 (LBA)	
hda4	7791525	7807589	8032+	ef	EFI (FAT-12/16/32)	

And this is correct (let's ignore size for now). I can verify this by mounting second file system as:

```
sudo mount hda 1 -o loop,offset=`expr 4819500 \* 512`
```

This seems to be off-by-one error. There is [bug reported against Debian package](#) which seems related, but than again, in my case I'm examining same disk image.