

1. ¿Qué requisitos debemos de cumplir para que la evidencia digital no se vea comprometida?

No modificar la prueba accediendo solo en modo lectura, comprobar que el hash de la copia sea igual al original.

2. ¿Qué materiales/software necesitas?

Kali-linux live en un pendrive, y un disco duro donde llevar la copia.

3. Clonado de Disco:

```
kali@kali: ~  
File Actions Edit View Help  
Sector size (logical/physical): 512 bytes / 512 bytes  
I/O size (minimum/optimal): 512 bytes / 512 bytes  
  
Disk /dev/mapper/debian--vg-swap_1: 976 MiB, 1023410176 bytes, 1998848 sectors  
Units: sectors of 1 * 512 = 512 bytes  
Sector size (logical/physical): 512 bytes / 512 bytes  
I/O size (minimum/optimal): 512 bytes / 512 bytes  
  
Disk /dev/mapper/debian--vg-home: 1.76 GiB, 1887436800 bytes, 3686400 sectors  
Units: sectors of 1 * 512 = 512 bytes  
Sector size (logical/physical): 512 bytes / 512 bytes  
I/O size (minimum/optimal): 512 bytes / 512 bytes  
  
Disk /dev/loop0: 3.77 GiB, 4051550208 bytes, 7913184 sectors  
Units: sectors of 1 * 512 = 512 bytes  
Sector size (logical/physical): 512 bytes / 512 bytes  
I/O size (minimum/optimal): 512 bytes / 512 bytes  
  
(kali@kali)-[~]  
$ dd if=/dev/sda of=/dev/sdb bs=1M conv=sync,noerror status=progress  
dd: failed to open '/dev/sda': Permission denied  
  
(kali@kali)-[~]  
$ sudo dd if=/dev/sda of=/dev/sdb bs=1M conv=sync,noerror status=progress  
5162139648 bytes (5.2 GB, 4.8 GiB) copied, 10 s, 516 MB/s  
5120+0 records in  
5120+0 records out  
5368709120 bytes (5.4 GB, 5.0 GiB) copied, 10.4931 s, 512 MB/s  
  
(kali@kali)-[~]  
$ dd if=/dev/sdb count=10485760 bs=512 | sha512sum  
dd: failed to open '/dev/sdb': Permission denied  
cf83e1357eeeb8bdf1542850d66d8007d620e4050b5715dc83f4a921d36ce9ce47d0d13c5d85f2b0ff8318d2877eec2f63b931bd47417a81a53  
8327af927da3e -  
  
(kali@kali)-[~]  
$ sudo dd if=/dev/sdb count=10485760 bs=512 | sha512sum  
10485760+0 records in  
10485760+0 records out  
5368709120 bytes (5.4 GB, 5.0 GiB) copied, 26.8028 s, 200 MB/s  
f083c828f4c9f06f593ed470b12be44e5f2d485e0c9ad0a0da2636c071f03d881d1dddd1e2946  
f7b14814626075b2395222d99a92903d0f5134aaabaca5c30ae -  
  
(kali@kali)-[~]  
$
```

Hash:

f083c828f4c9f06f593ed470b12be44e5f2d485e0c9ad0a0da2636c071f03d881d1dddd1e2946
f7b14814626075b2395222d99a92903d0f5134aaabaca5c30ae

Segundo Hash:

f083c828f4c9f06f593ed470b12be44e5f2d485e0c9ad0a0da2636c071f03d881d1dddd1e2946
f7b14814626075b2395222d99a92903d0f5134aaabaca5c30ae

```

File Actions Edit View Help
(kali@kali)-[~]
$ history
 1 fdisk /l
 2 fdisk
 3 fdisk --help
 4 fdisk /l
 5 fdisk -l
 6 sudo fdisk -l
 7 dd if=/dev/sda of=/dev/sdb bs=1M conv=sync,noerror status=progress
 8 sudo dd if=/dev/sda of=/dev/sdb bs=1M conv=sync,noerror status=progress
 9 dd if=/dev/sdb count=10485760 bs=512 | sha512sum
10 sudo dd if=/dev/sdb count=10485760 bs=512 | sha512sum
11 history
12 sudo dd if=/dev/sdb count=10485760 bs=512 | sha512sum
(kali@kali)-[~]
$

```

4. Imagen de Disco:

```

File Actions Edit View Help
(kali@kali)-[~]
$ sudo dd if=/dev/sda of=/mnt/imagen.dd
10485760+0 records in
10485760+0 records out
5368709120 bytes (5.4 GB, 5.0 GiB) copied, 21.0984 s, 254 MB/s

(kali@kali)-[~]
$ sha512sum /mnt/imagen.dd
f083c828f4c9f06f593ed470b12be44e5f2d485e0c9ad0a0da2636c071f03d881d1dddd1e2946f7b14814626075b2395222d99a92903d0f5134aaabaca5c30ae /mnt/imagen.dd

(kali@kali)-[~]
$ sha512sum /dev/sda
sha512sum: /dev/sda: Permission denied

(kali@kali)-[~]
$ sudo sha512sum /dev/sda
f083c828f4c9f06f593ed470b12be44e5f2d485e0c9ad0a0da2636c071f03d881d1dddd1e2946f7b14814626075b2395222d99a92903d0f5134aaabaca5c30ae /dev/sda

(kali@kali)-[~]
$

```

Hash:

f083c828f4c9f06f593ed470b12be44e5f2d485e0c9ad0a0da2636c071f03d881d1dddd1e2946f7b14814626075b2395222d99a92903d0f5134aaabaca5c30ae /mnt/imagen.dd

Segundo Hash:

f083c828f4c9f06f593ed470b12be44e5f2d485e0c9ad0a0da2636c071f03d881d1dddd1e2946f7b14814626075b2395222d99a92903d0f5134aaabaca5c30ae /dev/sda

```
File Actions Edit View Help
(kali@kali)-[~]
$ history
 1 fdisk /l
 2 fdisk
 3 fdisk --help
 4 fdisk /l
 5 fdisk -l
 6 sudo fdisk -l
 7 dd if=/dev/sda of=/dev/sdb bs=1M conv=sync,noerror status=progress
 8 sudo dd if=/dev/sda of=/dev/sdb bs=1M conv=sync,noerror status=progress
 9 dd if=/dev/sdb count=10485760 bs=512 | sha512sum
10 sudo dd if=/dev/sdb count=10485760 bs=512 | sha512sum
11 history
12 sudo dd if=/dev/sdb count=10485760 bs=512 | sha512sum
13 history
14 fdisk /dev/sdb
15 sudo fdisk /dev/sdb
16 mkfs.ext4 /dev/sdb1
17 sudo mkfs.ext4 /dev/sdb1
18 sudo mount /dev/sdb1 /imagen.dd\n
19 sudo mount /dev/sdb1 /imagen\n
20 sudo mount /dev/sdb1 /mnt\n
21 sudo mount /dev/sdb1 /mnt/imagen.dd
22 sudo dd if=/dev/sda of=/mnt/imagen.dd
23 sha512sum /mnt/imagen.dd
24 sha512sum /dev/sda
25 sudo sha512sum /dev/sda
(kali@kali)-[~]
$
```