

Writeup - Diskfall

When a user will get the disk the first commands might be:

- 1) mmfs disk.img or fdisk -l disk.img # They will see 2 partitions
- 2) losetup -fP disk.img # To make the partitions on loop
- 3) mkdir /mnt/fat32 /mnt/linux
- 4) mount -o ro /dev/loop0p1 /mnt/fat32 # Mounting FAT32 partition
- 5) mount -o ro /dev/loop0p2 /mnt/linux # Mounting linux partition, gives superblock error

Part1

- 6) fls -f fat32 -o 2048 disk.img # Will give an deleted file, which will contain first part
- 7) lcat -f fat32 -o 2048 disk.img 7 > secret.txt # 1st part of the flag

Now user still needs to check the **/mnt/fat32** folder as it has **.images** folder

- 8) cd /mnt/fat32
- 9) ls -la
- 10) cd .images # Will see 2 images
- 11) strings * # User can see that there is some encryption, some hidden data
- 12) stegseek --crack banner.jpg/chest.jpg <rockyou.txt> or stegcracker
banner.jpeg/chest.jpeg <rockyou.txt> # User will need to think about the wordlist

Users will get db.log and some decoy log files, now users will need to read through them and need to understand that **db.log** has information related to password, so the password attempts are wrong, but user needs to get those passwords and create **an wordlist** from those wrong passwords

Wordlist Making - crunch {{6}} {{6}} -p 23que

- 13) exiftool * # Will get an **bcrypt hash** in as metadata from chest.jpeg

Part2

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14) binwalk -e disk.img --run-as=root #will show that the partition contains a 7z file  
15) dd if=/dev/loop0p2 of=part2.7z bs=1 skip=512 status=progress or dd if=disk.img  
    of=part2.7z count=1 skip=3146240 status=progress #To extract the 7z file from the  
    /dev/loop0p2 partition
```

Now users will see that part2.7z has encryption, now they will apply their wordlist on the hash

```
16) echo "<hash>" > hashes.txt # Storing the hash  
17) john --format=bcrypt --wordlist=createdwordlist.txt hasesh.txt #Will give them password  
18) 7z x part2.7z # To extract the 7z file
```

Users can now put password and get part2_blob