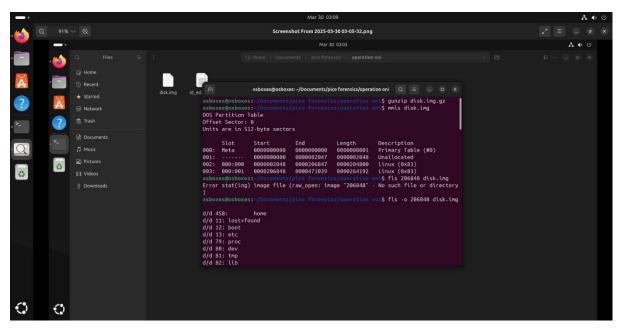
Description

Download this disk image, find the key and log into the remote machine. Note: if you are using the webshell, download and extract the disk image into /tmp not your home directory.

Download disk image

Remote machine: ssh -i key_file -p 65007 ctf-player@saturn.picoctf.net



At first unzip the document

gunzip disk.img.gz

mmls disk.img

DOS Partition Table
Offset Sector: 0

Units are in 512-byte sectors

```
Slot Start End Length Description

000: Meta 0000000000 0000000000 0000000001 Primary Table (#0)

001: ------ 0000000000 0000002047 0000002048 Unallocated

002: 000:000 0000002048 0000206847 0000204800 Linux (0x83)

003: 000:001 0000206848 0000471039 0000264192 Linux (0x83)
```

Then use mmls to get the partitions

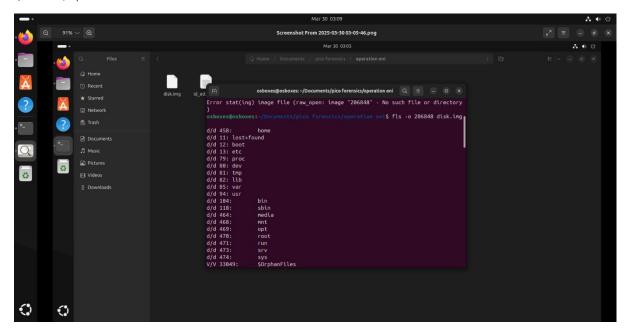
Then use fls to check the partitions in details

fls -o 206848 disk.img

d/d 458: home
d/d 11: lost+found

d/d 12: boot d/d 13: etc d/d 79: proc d/d 80: dev d/d 81: tmp d/d 82: d/d 85: var d/d 94: usr d/d 104: bin d/d 118: sbin d/d 464: media d/d 468: mnt d/d 469: d/d 470: root d/d 471: run d/d 473: srv d/d 474: sys

V/V 33049: \$OrphanFiles



Check the root folder

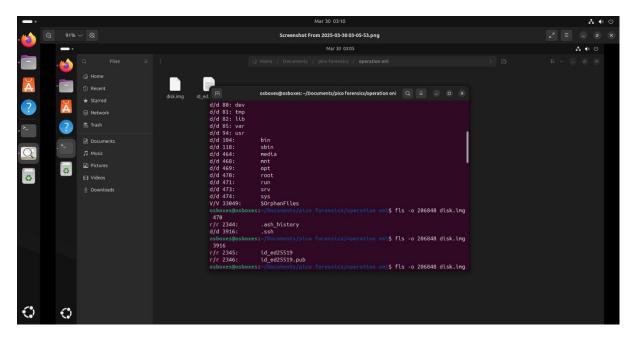
fls -o 206848 disk.img 470

r/r 2344: .ash_history

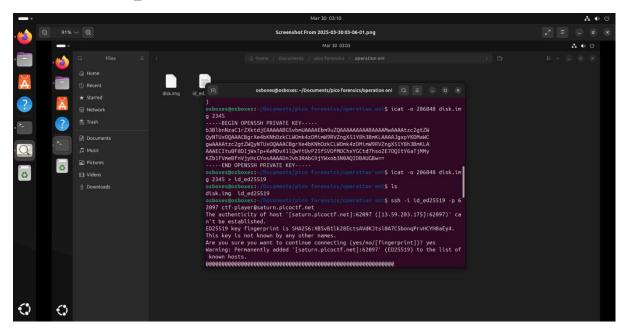
d/d 3916: .ssh

fls -o 206848 disk.img 3916

r/r 2345: id_ed25519 r/r 2346: id_ed25519.pub



We have .ssh and id _ed check them and download them with I cat



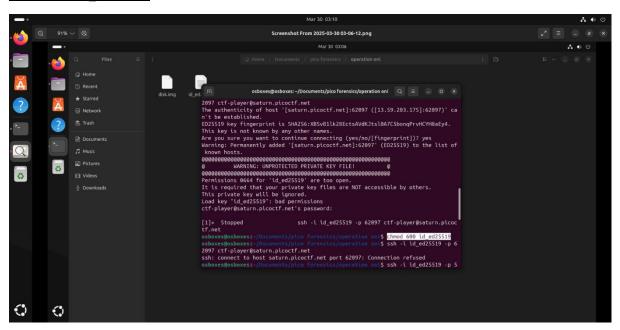
<u>icat -o 206848 disk.img 2345</u>

-----BEGIN OPENSSH PRIVATE KEY----b3BlbnNzaC1rZXktdjEAAAAABG5vbmUAAAAEbm9uZQAAAAAAAAAAAAAAAAAAAAtzc2gtZW
QyNTUxOQAAACBgrXe4bKNhOzkCLWOmk4zDMimW9RVZngX51Y8h3BmKLAAAAJgxpYKDMaWC
gwAAAAtzc2gtZWQyNTUxOQAAACBgrXe4bKNhOzkCLWOmk4zDMimW9RVZngX51Y8h3BmKLA
AAAECltu0F8DljWxTp+KeMDvX1lQwYtUvP2SfSVOfMOChxYGCtd7hso2E7OQltY6aTjMMy
KZb1FVmeBfnVjyHcGYosAAAADnJvb3RAbG9jYWxob3N0AQlDBAUGBw==
-----END OPENSSH PRIVATE KEY-----

icat -o 206848 disk.img 2345 > id ed25519

Lower the permissions

chmod 600 id_ed25519



And use the file and get the flag