

How to do this do with `dd`

creation of an virtual disk under linux

1 - do `dd`

```
sudo dd if=/dev/zero of=vdisk0.img bs=100M count=100 iflag=fullblock status=progress
```

2 - do `cfdisk`

```
sudo cfdisk vdisk0.img
```

and create the table of partition

3 - after `dd` do : `mkfs`

```
sudo mkfs.ext4 -f vdisk0.img
```

4 - and `mount`

```
sudo mount vdisk0.img /mnt
```

Now you can reformat into XFS under an LUKS if you want.... ;)

Encrypted virtual disk (LUKS)

create the folder `vdisks` with `mkdir -p /vdisks`

1 - do `dd`

```
sudo dd if=/dev/random of=/vdisks/secret-data.img bs=100M count=100 iflag=fullblock status=progress
```

2 - after `dd` do `cfdisk`

```
sudo cfdisk /vdisks/secret-data.img
```

and create the table of partition

3 - after have do `cfdisk` please do `cryptsetup` to format

```
sudo cryptsetup luksFormat /vdisks/secret-data.img
```

set your password of this disk(asked)

4 - mount the disk with this

an password can be asked

```
sudo cryptsetup luksOpen /vdisks/secret-data.img secret  
sudo mount /dev/mapper/secret /mnt
```

And if you want unmount

```
sudo umount /mnt && sudo cryptsetup luksClose /dev/mapper/secret
```

...Now you know how to do this