

## HOW TO FORMAT NVMe SSD to 4k sectors

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Well i'm not at work and am writing this of my memory and on an iphone so it may lack some precisions :

- first, download a small and recent linux distribution (xubuntu 17.04 is fine)
- "burn" it to a fast 8GB usb key (there are lots of tutorials on this : you need to convert the iso format and write to the usb key with "dd". There are also automated tools like unetbootin)
- put the NVMe drive into your mac, and start it with the linux usb key plugged while pressing the alt key
- choose the "efi" logo corresponding to the linux usb key and start from it
- while prompted, chose "try xubuntu" (live session)
- once on the linux desktop, you can set the display resolution to one usable and connect the mac to the internet (either with wifi or with an usb to ethernet adapter)
- open the terminal and install the needed tools :  
`sudo apt-get install nvme-cli smartmontools`  
validate with "Y"
- verify your SSD is recognized and manage 4K blocs by typing :  
`sudo smartctl -a /dev/nvme0`  
You should have two lines under "Supported LBA sizes"  
one with data 512B starting with ID 0  
one with data 4K starting with ID 1  
(if you don't, stop here...)  
The 512K should being selected with an asterix\*

- format the SSD with 4K blocs with the command :  
`sudo nvme format -l 1 /dev/nvme0`  
(WARNING : this of course erase all data on the internal NVMe SSD)

retype the smartCTL command to verify that the LBA 4K size is properly selected.

You can then restart your mac on a Sierra or High Sierra install disk.