

Surface Pro 3 Grub Boot

How to install grub2 in efi after it failed to install it automatically

1. Boot into Ubuntu LiveCD
2. Open a Terminal, access sudo

3.

```
modprobe efivars
```

4. Mount the installed ubuntu partition on /mnt

```
mount /dev/sdaX /mnt
for i in /dev /dev/pts /proc /sys; do mount --bind $i /mnt$i; done
```

Mount the efi partition in the ubuntu system partition

```
mount /dev/sdaX /mnt/boot/efi
```

5. Chroot into mnt `chroot /mnt`
6. Check if you got access to the efi boot manager entries

```
efibootmgr -v
```

If you get errors like Input/Output error for Boot0003 or so you have to enter the entries manually later.

7. install grub:

```
apt-get update && apt-get install --reinstall grub-efi
grub-install
update-grub
```

If you got no error you should be done.

If you got an error on efibootmgr before you are NOT done.

8. Open another terminal with sudo access
9. Look up all boot entries with

```
efibootmgr -v
```

delete all unused entries with

```
efibootmgr -b <X> -B
```

- -b X defines the Boot000X number
- -B removes

10. Add the boot entry for your system

```
efibootmgr -c -d /dev/sda -p X -L "BootEntryName" -l "\efi\ubuntu\grubx64.efi"
```

- -c creates new entry -d is the disk -p is the sdaX entry of the EFI partition
- -L is the shown Name on the Grub Loader -l is the path on the EFI Partition to the loader

on ubuntu it **SHOULD BE** `\efi\ubuntu\grubx64.efi` but verify first!

YES BACKSLASHES NEEDED

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