

How To: Change Graphics Mode for GRUB Bootloader



One of the remaining things to fix on my new **Dell XPS 13 laptop** has been the graphics mode in GRUB bootloader that got activated with my [Ubuntu 19.04 install](#). Somehow GRUB is smart enough to recognise 4K resolution on the laptop, so the GRUB boot menu looks so tiny that I can't read any text (there's no scaling applied to fonts). I finally decided to fix this.

Graphics modes in GRUB bootloader

GRUB is a simple enough software solution that traditionally used text console for presenting boot menu. In the last few years it introduced graphics mode: you still see a text menu with boot options, but they're rendered in a graphics mode rather than shown in text mode.

Turns out, there's a special option in `/boot/grub/grub.cfg` file that allows you to select a graphics resolution:

```
set gfxmode=1024x768
```

Change graphics mode for GRUB

To update this value properly, I suggest you edit the GRUB_GFXMODE in /etc/default/grub file:

```
GRUB_GFXMODE=1024x768
```

IMPORTANT: 1920×1080 mode is NOT supported, so don't specify it. 1024×768 is a safe resolution that should be available on most hardware systems. I'll write another post soon expanding on **GRUB bootloader graphics resolutions** topic.

Once this is done, re-build all the grub configuration files:

```
$ sudo grub-update
```

To verify that our resolution of 1024×768 made it into the config, grep for it:

```
greys@xps:~ $ grep 1024 /boot/grub/grub.cfg
set gfxmode=1024x768
```

That's it, you can reboot your PC or laptop now to enjoy a different resolution.

See Also

- [My hardware lab](#)
- [Ubuntu 19.04](#)
- [GRUB Bootloader](#)
- [Unix Reference](#)
- [Unix Glossary](#)