

How to boot into command line on Ubuntu or Debian

Author : Dan Nanni

Categories : [Debian](#), [Kernel](#), [Ubuntu](#)

Tagged as : [bootinggrub](#)

Question: I am running Ubuntu desktop, but I want to boot straight into text-mode console temporarily. What is a convenient way to disable desktop GUI and boot into a terminal?

Linux desktop comes with a display manager (e.g., GDM, KDM, LightDM), which lets the desktop machine automatically boot into a GUI-based login environment. However, what if you want to disable GUI and boot straight into a text-mode console? For example, you are troubleshooting desktop related issues, or want to run a heavy-duty application that does not require desktop GUI.

Note that you can temporarily switch from desktop GUI to a virtual console by pressing Ctrl+Alt+F1 to F6. However, in this case your desktop GUI will be still running in the background, and thus is different from pure text-mode booting.

On Ubuntu or Debian desktop, you can enable text-mode booting by passing appropriate kernel parameters.

Boot into Command-line Temporarily

If you want to disable desktop GUI and boot in text-mode just one-time, you can use GRUB menu interface.

First, power on your desktop. When you see the initial GRUB menu, press 'e'.

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This will lead you to the next screen, where you can modify kernel booting parameters. Scroll down the screen to look for a line that begins with "linux", which indicates a list of kernel parameters. Remove from the list "quiet" and "splash". Add "text" in the list instead.

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```
GNU GRUB  version 2.02~beta2-9
```

```
insmod part_msdos
insmod ext2
set root='hd0,msdos1'
if [ x$feature_platform_search_hint = xy ]; then
  search --no-floppy --fs-uuid --set=root --hint-bios=hd0,msdos1\
--hint-efi=hd0,msdos1 --hint-baremetal=ahci0,msdos1  af2e8c22-23f1-4894\
-82ae-9d34c5c3f4cf
else
  search --no-floppy --fs-uuid --set=root af2e8c22-23f1-4894-82a\
e-9d34c5c3f4cf
fi
linux      /boot/vmlinuz-3.13.0-24-generic root=UUID=af2e8c22-\
23f1-4894-82ae-9d34c5c3f4cf ro quiet splash $vt_handoff_
initrd    /boot/initrd.img-3.13.0-24-generic
```

Minimum Emacs-like screen editing is supported. TAB lists completions. Press Ctrl-x or F10 to boot, Ctrl-c or F2 for a command-line or ESC to discard edits and return to the GRUB menu.

Change this to "text"

The updated kernel parameter list looks like the following. Press Ctrl+x to continue booting. This will enable one-time console booting in verbose mode.

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--hint-efi=hd0,msdos1 --hint-baremetal=ahci0,msdos1 af2e8c22-23f1-4894\
-82ae-9d34c5c3f4cf
else
  search --no-floppy --fs-uuid --set=root af2e8c22-23f1-4894-82a\
e-9d34c5c3f4cf
fi
linux      /boot/vmlinuz-3.13.0-24-generic root=UUID=af2e8c22-\
23f1-4894-82ae-9d34c5c3f4cf ro text $vt_handoff_
initrd     /boot/initrd.img-3.13.0-24-generic

Minimum Emacs-like screen editing is supported. TAB lists
completions. Press Ctrl-x or F10 to boot, Ctrl-c or F2 for a
command-line or ESC to discard edits and return to the GRUB
menu.

Press Ctrl+x to continue booting
```

Boot into Command-line Permanently

If you want to boot into command-line permanently, you need to [update GRUB configuration](#) which defines kernel booting parameters.

Open a default GRUB config file with a text editor.

```
$ sudo vi /etc/default/grub
```

Look for a line that starts with GRUB_CMDLINE_LINUX_DEFAULT, and comment out that line by prepending # sign. This will disable the initial splash screen, and enable verbose mode (i.e., showing the detailed booting procedure).

Then change GRUB_CMDLINE_LINUX="" to:

```
GRUB_CMDLINE_LINUX="text"
```

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Next, uncomment the line that says "#GRUB_TERMINAL=console".

The updated GRUB default configuration looks like the following.

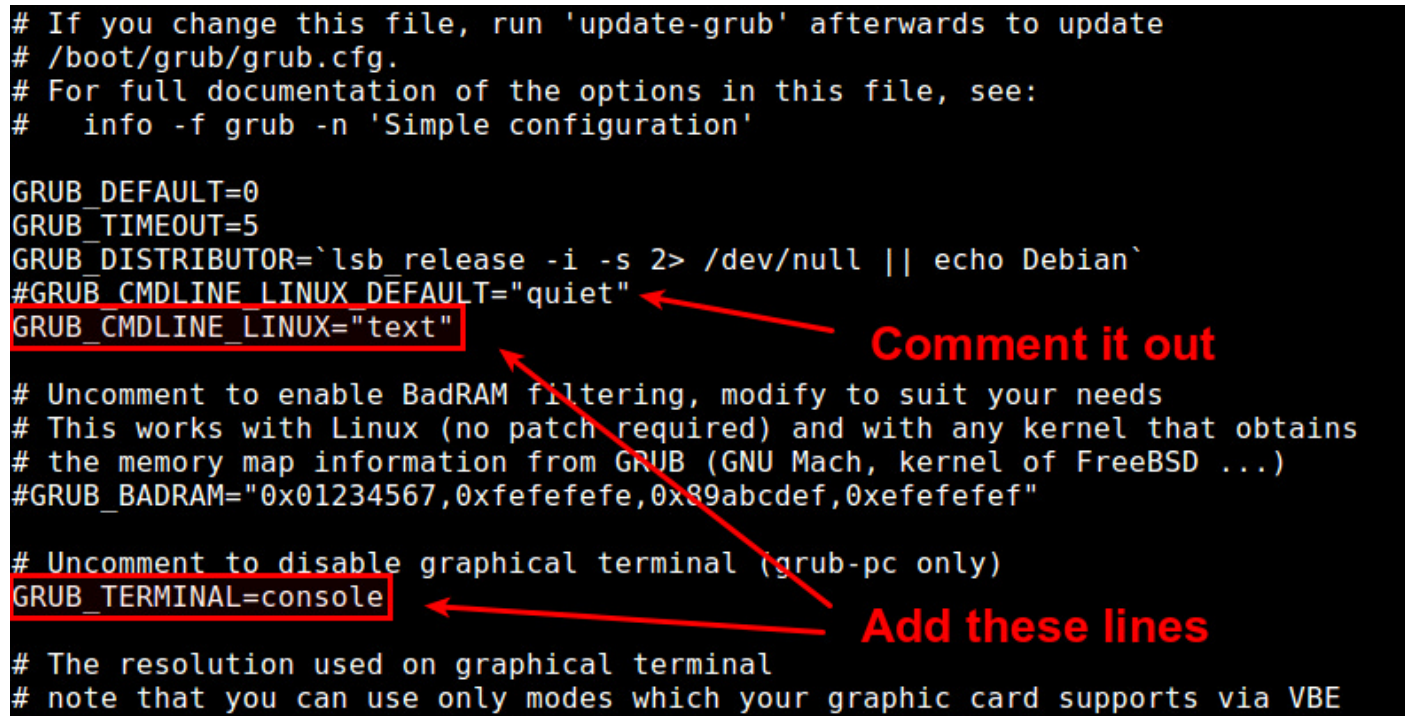
```
# If you change this file, run 'update-grub' afterwards to update
# /boot/grub/grub.cfg.
# For full documentation of the options in this file, see:
# info -f grub -n 'Simple configuration'

GRUB_DEFAULT=0
GRUB_TIMEOUT=5
GRUB_DISTRIBUTOR=`lsb_release -i -s 2> /dev/null || echo Debian`
#GRUB_CMDLINE_LINUX_DEFAULT="quiet"
GRUB_CMDLINE_LINUX="text"

# Uncomment to enable BadRAM filtering, modify to suit your needs
# This works with Linux (no patch required) and with any kernel that obtains
# the memory map information from GRUB (GNU Mach, kernel of FreeBSD ...)
#GRUB_BADRAM="0x01234567,0xfefefefe,0x89abcdef,0xefefefef"

# Uncomment to disable graphical terminal (grub-pc only)
GRUB_TERMINAL=console

# The resolution used on graphical terminal
# note that you can use only modes which your graphic card supports via VBE
```



Finally, invoke `update-grub` command to re-generate a GRUB2 config file under `/boot`, based on these changes.

```
$ sudo update-grub
```

At this point, your desktop should be switched from GUI booting to console booting. Verify this by rebooting.

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```
Ubuntu 14.04 LTS ubuntu tty1
```

```
ubuntu login: _
```