



A **/boot** directory might look like the one in the screenshot below:

```
File Edit View Search Terminal Help
c7:/boot>ls -lF
total 243116
-rw-r--r-- 1 root root 147837 Jul 16 11:43 config-3.10.0-862.9.1.el7.x86_64
-rw-r--r-- 1 root root 113689 Aug 3 06:58 config-4.17.12
-rw-r--r-- 1 root root 113689 Aug 7 06:57 config-4.17.13
-rw-r--r-- 1 root root 114915 Aug 6 06:47 config-4.18.0-rc8
-rw-r----- 1 coop coop 669045 Dec 12 2014 despair.jpg
drwxr-xr-x 3 root root 4096 Jan 21 2015 efi/
-rw-r--r-- 1 root root 192572 Apr 5 2016 elf-memtest86+-5.01
drwxr-xr-x 2 root root 4096 Feb 28 17:28 grub/
drwx----- 6 root root 4096 Aug 8 13:45 grub2/
-rw-r--r-- 1 root root 40737576 Jan 15 2015 initramfs-0-rescue-2f662f01c5014d589867e4c1fb99bbf6.img
-rw----- 1 root root 31639895 Jul 18 06:42 initramfs-3.10.0-862.9.1.el7.x86_64.img
-rw----- 1 root root 30073160 Aug 3 06:58 initramfs-4.17.12.img
-rw----- 1 root root 30072773 Aug 7 06:58 initramfs-4.17.13.img
-rw----- 1 root root 30094995 Aug 6 06:47 initramfs-4.18.0-rc8.img
-rw-r--r-- 1 root root 10187519 Feb 28 17:29 initrd-plymouth.img
-rw-r--r-- 1 root root 190896 Apr 5 2016 memtest86+-5.01
-rw-rw-r-- 1 coop coop 19468 Dec 17 2015 penguin_gun.jpg
-rw-r--r-- 1 root root 305117 Jul 16 11:45 symvers-3.10.0-862.9.1.el7.x86_64.gz
-rw----- 1 root root 3412056 Jul 16 11:43 System.map-3.10.0-862.9.1.el7.x86_64
-rw-r--r-- 1 root root 3151246 Aug 3 06:58 System.map-4.17.12
-rw-r--r-- 1 root root 3151278 Aug 7 06:57 System.map-4.17.13
-rw-r--r-- 1 root root 3158707 Aug 6 06:47 System.map-4.18.0-rc8
-rwxr-xr-x 1 root root 38059584 Sep 8 2017 vmlinuz-4.13.0FC26*
-rwxr-xr-x 1 root root 4902000 Jan 15 2015 vmlinuz-0-rescue-2f662f01c5014d589867e4c1fb99bbf6*
-rwxr-xr-x 1 root root 6234048 Jul 16 11:43 vmlinuz-3.10.0-862.9.1.el7.x86_64*
-rw-r--r-- 1 root root 6266928 Aug 3 06:58 vmlinuz-4.17.12
-rw-r--r-- 1 root root 6266928 Aug 7 06:57 vmlinuz-4.17.13
-rw-r--r-- 1 root root 6311984 Aug 6 06:47 vmlinuz-4.18.0-rc8
c7:/boot>
```

In this example, there are multiple possible kernels to boot into, each of which has four files associated with it:

- **vmlinuz** is the compressed kernel
- **initramfs** contains a complete initial root filesystem which is loaded as a ramdisk, as well as some essential kernel modules (generally, device drivers) and the programs needed to load them, that are required to load the real filesystem, at which point it is discarded
- **config** contains all the details about how the kernel was compiled; it is not needed for system operation
- **System.map** lists the complete kernel symbol table; it is used only for debugging purposes

Depending on which Linux distribution is being used, there will be variations in the above possible kernels. For example, the **initramfs** file may actually be called **initrd**.

✓ Complete

Go to next item



