

Kernel Panic

Today's Perfect Scenario of Kernel Panic and how to fix it. Boot into the Linux

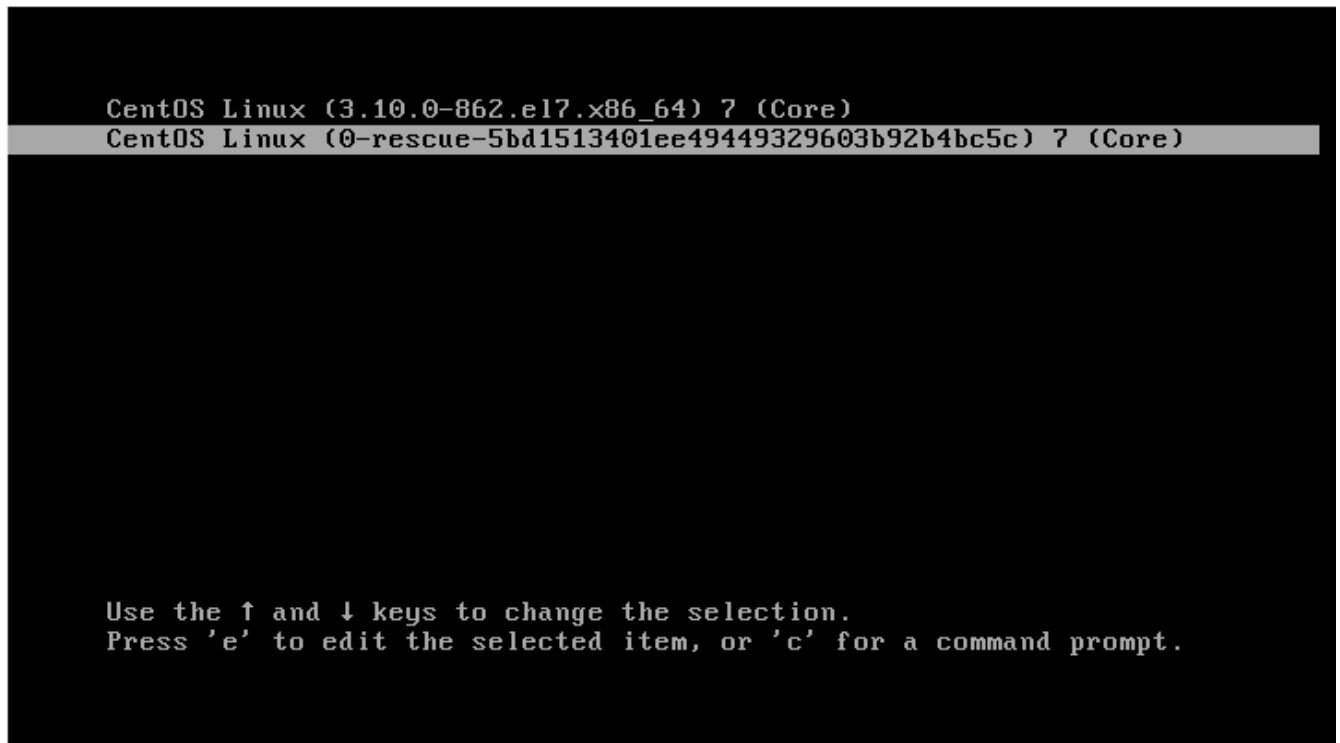
```
CentOS Linux (3.10.0-862.el7.x86_64) 7 (Core)  
CentOS Linux (0-rescue-5bd1513401ee49449329603b92b4bc5c) 7 (Core)
```

```
Use the ↑ and ↓ keys to change the selection.  
Press 'e' to edit the selected item, or 'c' for a command prompt.
```

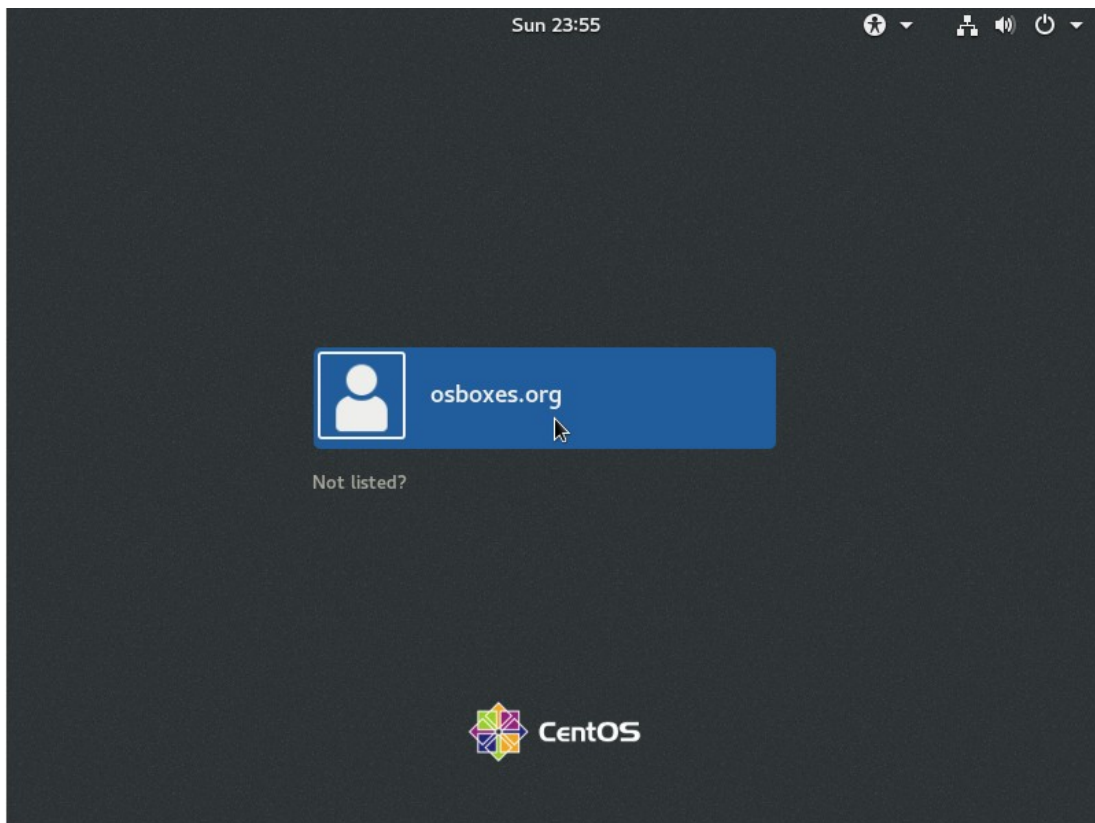
You will encounter this window in the and the error explaining which kernel is causing the panic.

```
error: file '/initramfs-3.10.0-862.el7.x86_64.img' not found.  
Press any key to continue...
```

Now simply reboot your system and remember to select **Rescue Mode** which is the second option in this menu.



Please note your system will now boot into the Single User mode or Rescue Mode as some like to call it. Log into the system and open a terminal.



Navigate into the boot directory by using `cd /boot/` and now type the `ls -lrth` command to view the files in the directory.

```
Applications  Places  Terminal  Sun 23:58
osboxes@osboxes:/boot

File Edit View Search Terminal Help
[osboxes@osboxes ~]$ cd /boot/
[osboxes@osboxes boot]$ ls -lrth
total 97M
-rw-----. 1 root root 3.3M Apr 20 2018 System.map-3.10.0-862.el7.x86_64
-rw-r--r--. 1 root root 145K Apr 20 2018 config-3.10.0-862.el7.x86_64
-rwxr-xr-x. 1 root root 6.0M Apr 20 2018 vmlinuz-3.10.0-862.el7.x86_64
-rw-r--r--. 1 root root 298K Apr 20 2018 symvers-3.10.0-862.el7.x86_64.gz
drwx-----. 2 root root 16K Sep 9 2018 lost+found
drwxr-xr-x. 3 root root 4.0K Sep 9 2018 efi
drwxr-xr-x. 2 root root 4.0K Sep 9 2018 grub
-rw-----. 1 root root 71M Sep 9 2018 initramfs-0-rescue-5bd1513401ee49449329603b92b4bc5c.img
-rwxr-xr-x. 1 root root 6.0M Sep 9 2018 vmlinuz-0-rescue-5bd1513401ee49449329603b92b4bc5c
drwx-----. 5 root root 4.0K Sep 9 2018 grub2
-rw-----. 1 root root 9.8M Sep 9 2018 initramfs-3.10.0-862.el7.x86_64kdump.img
[osboxes@osboxes boot]$
```

Now we'll be using the **dracut** command to rebuild the kernel. Please note the **-f** in the dracut command is used for the **force**.

```
sudo dracut -f initramfs-3.10.0-862.el7.x86_64.img 3.10.0-862.el7.x86_64
```

You will see the following results that means **no error outputs**, that means you're all set. Now reboot your system and you can normally boot and continue working.

```
Applications  Places  Terminal  Mon 00:05
osboxes@osboxes:/boot

File Edit View Search Terminal Help
[osboxes@osboxes boot]$ sudo dracut -f initramfs-3.10.0-862.el7.x86_64.img 3.10.0-862.el7.x86_64
[sudo] password for osboxes:
[osboxes@osboxes boot]$
```

Please see the following screenshot, This is not required. But its a Advanced/Fancy way of rebuilding kernel.

```
[osboxes@osboxes boot]$ sudo dracut -f initramfs-$(uname -r).img $(uname -r)
[osboxes@osboxes boot]$ ls -lrth
total 124M
-rw-----. 1 root root 3.3M Apr 20 2018 System.map-3.10.0-862.el7.x86_64
-rw-r--r--. 1 root root 145K Apr 20 2018 config-3.10.0-862.el7.x86_64
-rwxr-xr-x. 1 root root 6.0M Apr 20 2018 vmlinuz-3.10.0-862.el7.x86_64
-rw-r--r--. 1 root root 298K Apr 20 2018 symvers-3.10.0-862.el7.x86_64.gz
drwx-----. 2 root root 16K Sep 9 2018 lost+found
drwxr-xr-x. 3 root root 4.0K Sep 9 2018 efi
drwxr-xr-x. 2 root root 4.0K Sep 9 2018 grub
-rw-----. 1 root root 71M Sep 9 2018 initramfs-0-rescue-5bd1513401ee49449329603b92b4bc5c.img
-rwxr-xr-x. 1 root root 6.0M Sep 9 2018 vmlinuz-0-rescue-5bd1513401ee49449329603b92b4bc5c
drwx-----. 5 root root 4.0K Sep 9 2018 grub2
-rw-----. 1 root root 9.8M Sep 9 2018 initramfs-3.10.0-862.el7.x86_64kdump.img
-rw-----. 1 root root 28M Apr 25 00:10 initramfs-3.10.0-862.el7.x86_64.img
[osboxes@osboxes boot]$
```