

Root User Password Reset

In this tutorial, I will be demonstrating how to reset the root user's password on a CentOS 7 minimal install VM. Refer to the prerequisites listed below to access the resources needed to complete this tutorial.

Prerequisites

- VirtualBox VM with a CentOS 7 minimal installation

For instructions on how to install VirtualBox and extension pack, see my [VirtualBox Install](#) tutorial [here](#).

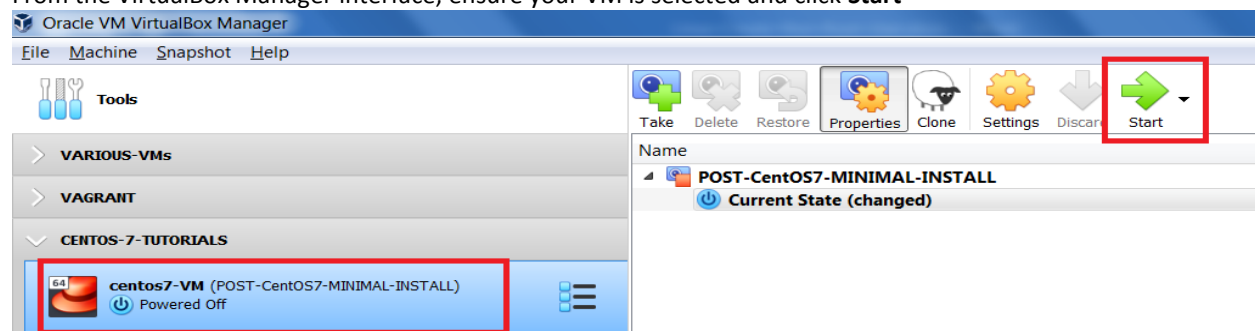
If you do not already have a virtual machine, with a minimal install of CentOS 7, my other tutorial is [here](#).

Steps to complete tutorial:

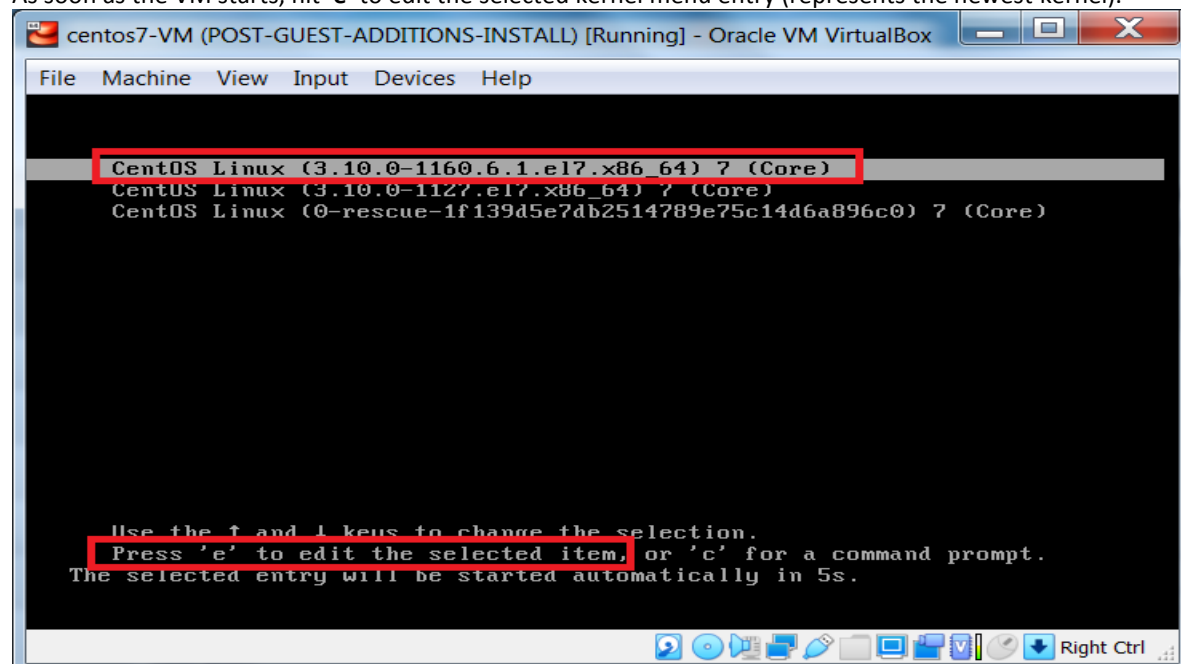
1. [Start Virtual Machine](#)
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Start Virtual Machine

From the VirtualBox Manager interface, ensure your VM is selected and click **Start**

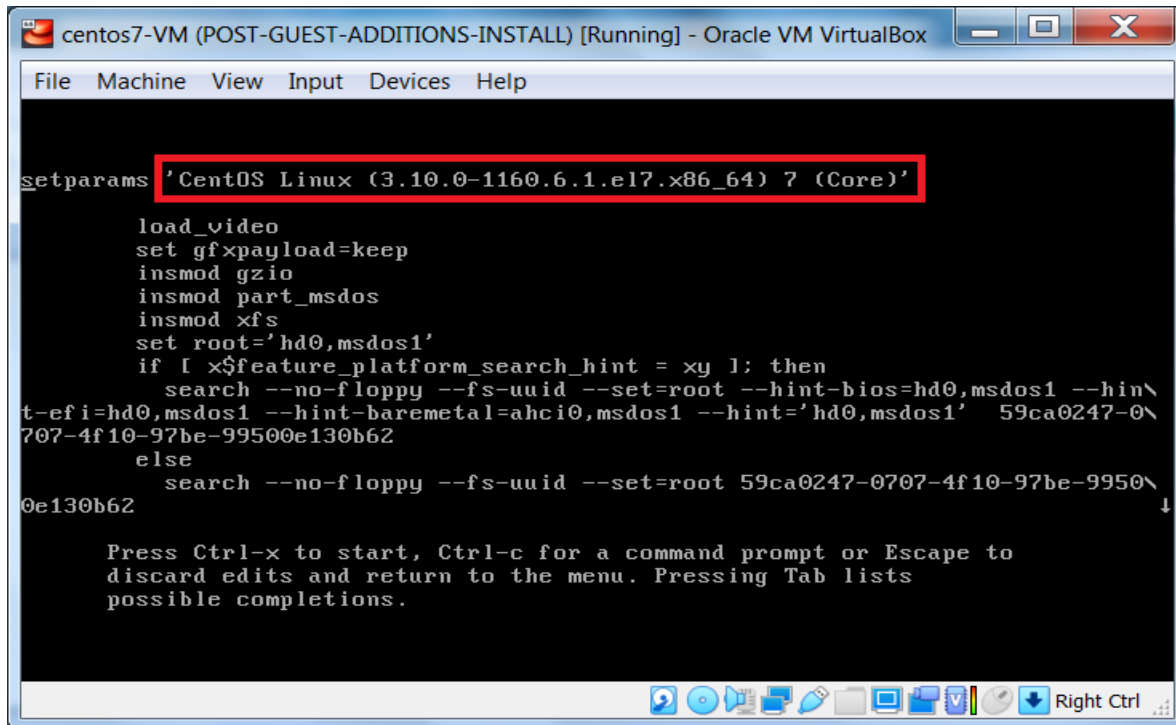


As soon as the VM starts, hit 'e' to edit the selected kernel menu entry (represents the newest kernel).



Edit GRUB Kernel Entry

You will see the menu entry for the selected kernel. Using your keyboard's up/down keys, scroll down to the line that begins with 'linux16'.

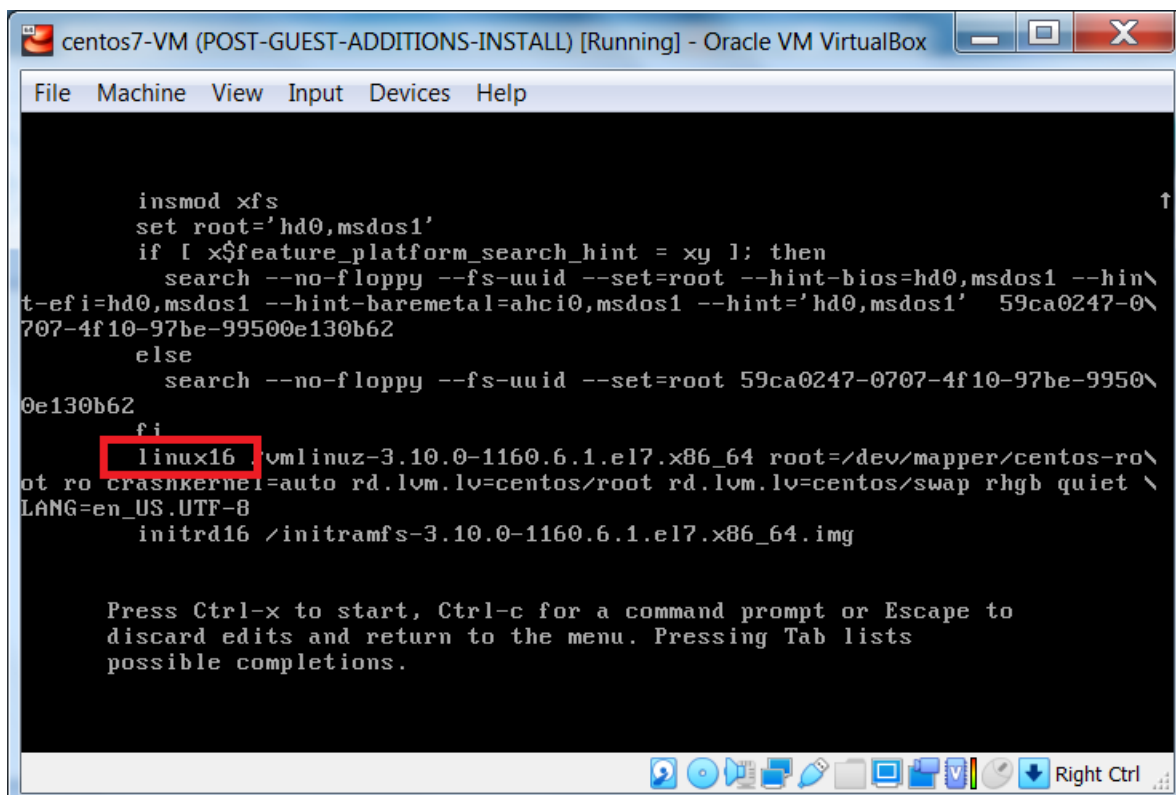


```
centos7-VM (POST-GUEST-ADDITIONS-INSTALL) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

setparams 'CentOS Linux (3.10.0-1160.6.1.el7.x86_64) 7 (Core)'

load_video
set gfxpayload=keep
insmod gzio
insmod part_msdos
insmod xfs
set root='hd0,msdos1'
if [ x$feature_platform_search_hint = xy ]; then
  search --no-floppy --fs-uuid --set=root --hint-bios=hd0,msdos1 --hin\
t-efi=hd0,msdos1 --hint-baremetal=ahci0,msdos1 --hint='hd0,msdos1' 59ca0247-0\
707-4f10-97be-99500e130b62
else
  search --no-floppy --fs-uuid --set=root 59ca0247-0707-4f10-97be-9950\
0e130b62

Press Ctrl-x to start, Ctrl-c for a command prompt or Escape to
discard edits and return to the menu. Pressing Tab lists
possible completions.
```



```
centos7-VM (POST-GUEST-ADDITIONS-INSTALL) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help

insmod xfs
set root='hd0,msdos1'
if [ x$feature_platform_search_hint = xy ]; then
  search --no-floppy --fs-uuid --set=root --hint-bios=hd0,msdos1 --hin\
t-efi=hd0,msdos1 --hint-baremetal=ahci0,msdos1 --hint='hd0,msdos1' 59ca0247-0\
707-4f10-97be-99500e130b62
else
  search --no-floppy --fs-uuid --set=root 59ca0247-0707-4f10-97be-9950\
0e130b62
fi
linux16 vmlinuz-3.10.0-1160.6.1.el7.x86_64 root=/dev/mapper/centos-ro\
ot ro crashkernel=auto rd.lvm.lv=centos/root rd.lvm.lv=centos/swap rhgb quiet \
LANG=en_US.UTF-8
initrd16 /initramfs-3.10.0-1160.6.1.el7.x86_64.img

Press Ctrl-x to start, Ctrl-c for a command prompt or Escape to
discard edits and return to the menu. Pressing Tab lists
possible completions.
```

Once you have located the line that begins with 'linux16', you will have to replace: **ro** with **rw init=/sysroot/bin/sh**

```
f1
linux16 /vmlinuz-3.10.0-1160.6.1.el7.x86_64 root=/dev/mapper/centos-ro\
ot ro crashkernel=auto rd.lvm.lv=centos/root rd.lvm.lv=centos/swap rhgb quiet \
LANG=en_US.UTF-8
initrd16 /initramfs-3.10.0-1160.6.1.el7.x86_64.img

Press Ctrl-x to start, Ctrl-c for a command prompt or Escape to
discard edits and return to the menu. Pressing Tab lists
possible completions.

f1
linux16 /vmlinuz-3.10.0-1160.6.1.el7.x86_64 root=/dev/mapper/centos-
ot rw init=/sysroot/bin/sh crashkernel=auto rd.lvm.lv=centos/root rd.lvm.lv=
ntos/swap rhgb quiet LANG=en_US.UTF-8
initrd16 /initramfs-3.10.0-1160.6.1.el7.x86_64.img

Press Ctrl-x to start, Ctrl-c for a command prompt or Escape to
discard edits and return to the menu. Pressing Tab lists
possible completions.
```

Then, you will need to hit **Ctrl + x** to start the operating system in emergency mode, this is where we will reset the **root** user's password.

Reset Password for Root User

Once you are in emergency mode, enter the following commands (one after the other):

```
# chroot /sysroot // change to the new root directory
# password root // reset the root user's password
# touch /.autorelabel // used to update SELinux filesystem contexts for next reboot
# reboot -f // reboot the system
```

```
Generating "/run/initramfs/rdsosreport.txt"

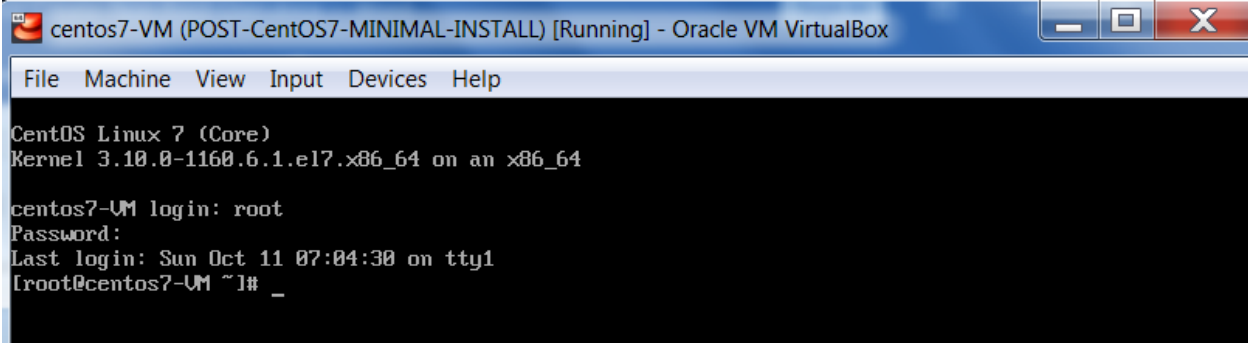
Entering emergency mode. Exit the shell to continue.
Type "journalctl" to view system logs.
You might want to save "/run/initramfs/rdsosreport.txt" to a USB stick or /boot
after mounting them and attach it to a bug report.

:~# chroot /sysroot
:~# passwd root
Changing password for user root.
New password:
BAD PASSWORD: The password fails the dictionary check - it is too simplistic/systematic
Retype new password:
passwd: all authentication tokens updated successfully.
:~# touch /.autorelabel
:~# reboot -f_
```

After resetting the root user's password and notifying the SELinux subsystem to relabel the filesystem on reboot, you rebooted the system. You will now be able to verify that the root user's password was successfully reset.

Confirm Access To System

Now that the system has booted, login using your **root** user's credentials.



```
centos7-VM (POST-CentOS7-MINIMAL-INSTALL) [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
CentOS Linux 7 (Core)
Kernel 3.10.0-1160.6.1.el7.x86_64 on an x86_64
centos7-VM login: root
Password:
Last login: Sun Oct 11 07:04:30 on tty1
[root@centos7-VM ~]# _
```

We have confirmed that we successfully reset the **root** user's password.

Hopefully, you've enjoyed completing this tutorial and found it helpful.

If you would like to see my other tutorials, they can be accessed [here](#).

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