How to reset root password on Fedora

A system administrator can easily reset a password for a user that has forgotten their password. But what happens if the system administrator forgets the root password? This guide will show you how to reset a lost or forgotten root password. Note that to reset the root password, you need to have physical access to the machine in order to reboot and to access GRUB settings. Additionally, if the system is encrypted, you will also need to know the LUKS passphrase.

Edit the GRUB settings

First you need to interrupt the boot process. So you'll need to turn on the system or restart, if it's already powered on. The first step is tricky because the grub menu tends to flash by very quickly on the screen.

Press **E** on your keyboard when you see the GRUB menu:

```
Fedora (4.11.11-300.fc26.x86_64) 26 (Twenty Six)
Fedora (4.11.8-300.fc26.x86_64) 26 (Twenty Six)
Fedora (0-rescue-3d393c85d3124215aae962516de3c294) 26 (Twenty Six)

Use the f and $\frac{1}{2}$ keys to change the selection.

Press 'e' to edit the selected item, or 'c' for a command prompt.

The selected entry will be started automatically in 1s.
```

After pressing 'e' the following screen is shown:

```
setparams 'Fedora (4.11.11-300.fc26.x86_64) 26 (Twenty Six)'

load_video
    set gfxpayload=keep
    insmod gzio
    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='hd0,msdos1' Odd4ed1\\d-1926-4487-a783-03f46035bcd7
    else
        search --no-floppy --fs-uuid --set=root Odd4ed1d-1926-4487-a783-03f4\\6035bcd7
    fi

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.
```

Use your arrow keys to move the the *linux16* line.

```
linux16 /vmlinuz-4.11.11-300.fc26.x86_64 root=/dev/mapper/fedora-root \
ro rd.lvm.lv=fedora/root rd.lvm.lv=fedora/swap rhgb quiet LANG=en_US.UTF-8
initrd16 /initramfs-4.11.11-300.fc26.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.
```

Using your *del* key or *backspace* key, remove *rhgb quiet* and replace with the following. rd.break enforcing=0

```
search --no-floppy --fs-uuid --set=root 0dd4ed1d-1926-4487-a783-03f4\
6035bcd7

fi
linux16 /vmlinuz-4.11.11-300.fc26.x86_64 root=/dev/mapper/fedora-root \
ro rd.lvm.lv=fedora/root rd.lvm.lv=fedora/swap rd.break enforcing=0 LANG=en_US\
.UTF-8

initrd16 /initramfs-4.11.11-300.fc26.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.
```

After editing the lines, Press *Ctrl-x* to start the system. If the system is encrypted, you will be prompted for the LUKS passphase here.

Note: Setting enforcing=0, avoids performing a complete system SELinux relabeling. Once the system is rebooted, restore the correct SELinux context for the /etc/shadow file. (this is explained a little further in this process)

Mounting the filesystem

The system will now be in emergency mode. Remount the hard drive with read-write access:

```
# mount -o remount,rw /sysroot
```

Password Change

Run chroot to access the system.

```
# chroot /sysroot
```

You can now change the root password.

```
# passwd
```

Type the new root password twice when prompted. If you are successful, you should see a message that *all authentication tokens updated successfully.*

Type *exit*, twice to reboot the system.

Log in as root and restore the SELinux label to the /etc/shadow file.

```
# restorecon -v /etc/shadow
```

Turn SELinux back to enforcing mode.

```
# setenforce 1
```