

Debian / PVE [How to reset forgotten root password](#)

I didn't log into it for months. That was time to decommission this test machine but I wanted to check what was left on this PVE instance. Yes, I have to admit it. I completely forgot the password of the root account on this machine.

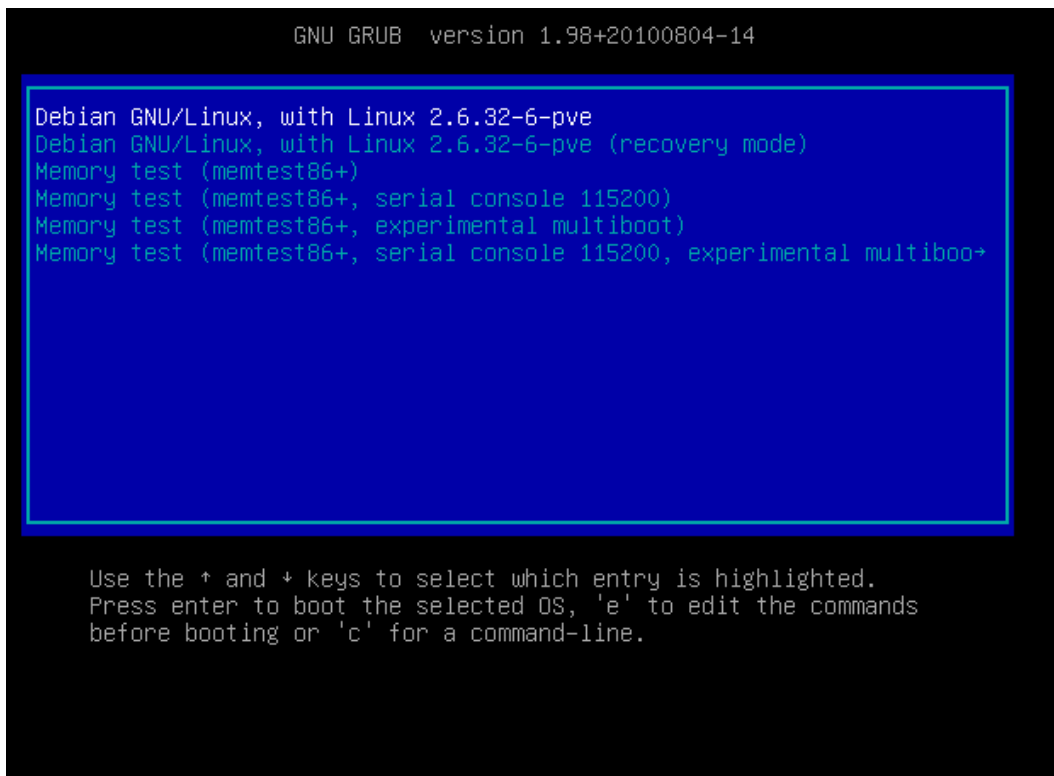
I was wondering if there was a way to recover it or reset it ! Because PVE is based on a Debian linux distribution, yes, there is a way to reset the root password and get access to your machine. This post will be really easy. Follow me !

Modifying the Boot Loader

Note : This should be working on all version of PVE. I'm demonstrating the process with PVE 2.0 where the boot loader is "Grub"

You do not need to have any special tools or liveCD. In order to reset the password admin on the PVE machine, you will need to boot it and modify the boot loader so we will be booting in command prompt mode where you will be able to issue your reset password command.

Step 1 – Boot your PVE machine. In the boot menu screen, you select your boot option and instead of pressing enter to proceed, you simply press "e" on your keyboard.



```
GNU GRUB  version 1.98+20100804-14

Debian GNU/Linux, with Linux 2.6.32-6-pve
Debian GNU/Linux, with Linux 2.6.32-6-pve (recovery mode)
Memory test (memtest86+)
Memory test (memtest86+, serial console 115200)
Memory test (memtest86+, experimental multiboot)
Memory test (memtest86+, serial console 115200, experimental multiboo+

Use the ↑ and ↓ keys to select which entry is highlighted.
Press enter to boot the selected OS, 'e' to edit the commands
before booting or 'c' for a command-line.
```

This will bring you to screen where you can edit the boot configuration file and modify the way the system will boot.

```
GNU GRUB  version 1.98+20100804-14

insmod part_msdos
insmod ext2
set root='(hd0,msdos1)'
search --no-floppy --fs-uuid --set 2ca02ade-a091-4481-86da-ccf433f09\
18c
echo 'Loading Linux 2.6.32-6-pve ...'
linux /vmlinuz-2.6.32-6-pve root=/dev/mapper/pve-root ro  quiet
echo 'Loading initial ramdisk ...'
initrd /initrd.img-2.6.32-6-pve

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

Step 2 – Append the following text at the end of the line starting with linux : **init=/bin/sh**

```
GNU GRUB  version 1.98+20100804-14

insmod part_msdos
insmod ext2
set root='(hd0,msdos1)'
search --no-floppy --fs-uuid --set 2ca02ade-a091-4481-86da-ccf433f09\
18c
echo 'Loading Linux 2.6.32-6-pve ...'
linux /vmlinuz-2.6.32-6-pve root=/dev/mapper/pve-root ro  init=/bin/s\
h_ quiet
echo 'Loading initial ramdisk ...'
initrd /initrd.img-2.6.32-6-pve

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

At this stage, simply press **CTRL + x** to boot your system.

Step 3 – Mount the filesystem

The system will boot in console mode. You will see something like this.

```
Loading, please wait...
mount: mounting none on /dev failed: No such device
W: devtmpfs not available, falling back to tmpfs for /dev
sd 2:0:0:0: [sdal] Assuming drive cache: write through
sd 2:0:0:0: [sdal] Assuming drive cache: write through
sd 2:0:0:0: [sdal] Assuming drive cache: write through
/bin/sh: can't access tty; job control turned off
# _
```

At the command line, you will have to type the following command: **mount -o remount rw /**

```
Loading, please wait...
mount: mounting none on /dev failed: No such device
W: devtmpfs not available, falling back to tmpfs for /dev
sd 2:0:0:0: [sdal] Assuming drive cache: write through
sd 2:0:0:0: [sdal] Assuming drive cache: write through
sd 2:0:0:0: [sdal] Assuming drive cache: write through
/bin/sh: can't access tty; job control turned off
# mount -o remount rw /_
```

Step 4 – Reset the password for the root account.

We are almost done. In order to reset the password, you will have to digit the command **passwd**. You will be asked to enter your new password and confirm it.

```
Loading, please wait...
mount: mounting none on /dev failed: No such device
W: devtmpfs not available, falling back to tmpfs for /dev
sd 2:0:0:0: [sdal] Assuming drive cache: write through
sd 2:0:0:0: [sdal] Assuming drive cache: write through
sd 2:0:0:0: [sdal] Assuming drive cache: write through
/bin/sh: can't access tty; job control turned off
# mount -o remount rw /
# passwd
Enter new UNIX password:
Retype new UNIX password:
passwd: password updated successfully
# _
```

When it's done, simply reboot your system and try to login using the newly reset password. You should be able to login into your PVE system.

Final Notes

You might want to document this procedure in case you lose your password for the root account. The PVE 2.0 has a role based model administration that should help you minimize annoyance of losing password. I'm assuming that with the role based models, organization will define more than one full administrative account in order to have a secondary account that could be used to recover or access the system in case of problem with the root account.