



Tutorial Link <https://course.testpad.chitkara.edu.in/tutorials/Recover root password and to set motd in linux/62e8bd73f90d2d345f891cc7>

TUTORIAL

Recover root password and to set motd in linux

Topics

- 1.1 Message of the Day on Linux Servers
- 1.2 Change and Reset Forgotten Root Password in RHEL 9

Message of the Day on Linux Servers

The motd is "Message Of The Day". This is quite useful technique to display welcome message or Warning Messages to the Linux Users.

The absolute path of motd file is /etc/motd in Linux Operating System.

Set motd(message of the day)

Setting motd in linux is very easy.You only have to edit the file /etc/motd

Uses of MOTD (Message Of The Day)

As the name defines, the motd is used for displaying message when user login into the system.

You can display any kind of message on screen. Either it can be legal notice, information, planned outage, warning, alert or anything as per your requirement.

and save it. (There is no service associated with motd)

For eg. I am setting the motd with information, **"Unauthorized access to this server is strictly prohibited !!"**

Similarly,you can write any other message in /etc/motd file .

```
vi /etc/motd

Unauthorized access to this server is strictly prohibited !!
```

Save the file /etc/motd .

Displaying motd to users accessing server by ssh

To display motd to users accessing by ssh method. We have to uncomment the **PrintMotd** parameter and make its value as **yes** in /etc/ssh/sshd_config file.

```
vi /etc/ssh/sshd_config
```

```
PrintMotd yes
```

Now restart or reload the ssh service

```
# In Debian/Ubuntu
/etc/init.d/ssh restart


# In RHEL/CentOS/Scientific Linux
/etc/init.d/sshd restart
```

How to verify is motdworking ?

To verify the motd status, just log-out and relogin to system again .

Also, access the system via ssh for verifying, in case users login with ssh method.

Example 1: Accessing directly to server. The system is running in runlevel 3



```
Red Hat Enterprise Linux Server release 6.2 (Santiago)
Kernel 2.6.32-220.el6.x86_64 on an x86_64

localhost login: root
Password:
Last login: Mon Aug  1 22:58:39 on tty2
*****

Welcome th the Server of US Armed Forces.
If you mistakelly here..logged out immediatly...
It is a punshibale offence to unauthorized access this Server

*****

[root@localhost ~]#
```

Example 2: Accessing server via ssh

```
linux@tuxworld:/$ ssh root@192.168.56.102
root@192.168.56.102's password:
Last login: Thu Apr  3 16:31:19 2014 from 192.168.56.1
Unauthorized access to this server is strictly prohibited !!
[root@localhost ~]#
[root@localhost ~]# cat /etc/motd
Unauthorized access to this server is strictly prohibited !!
[root@localhost ~]#
[root@localhost ~]# |
```

Change and Reset Forgotten Root Password in RHEL 9

Method 1: Changing Root Password in RHEL 9

So if you are a root user and want to change your existing root password, you can accomplish this task with a single command.

```
# passwd
```

Change Root Password in RHEL 9

And it will ask you to enter your new root password. For confirmation, it will ask you again for entering the new password and it will throw a message saying “**all authentication tokens updated successfully**”.

Method 2: Changing Root Password as Sudo User

For the majority, this will be the case where the user is added to the **wheel** group and want to change the root password. Thankfully, you can change your root password even if you don't know the current one.

To change your root password as a **wheel** group user, utilize the given command:

```
$ sudo passwd root
```

Sudo User Change Root Password

First, you'll be asked to enter your user password and after that, you'll be allowed to change your root password by entering it twice and for confirmation.

Method 3: Changing Forgotten Root Password in RHEL 9

This method is for those who are not root users or their local user is not added to the **Wheel** group and still wants to change or reset their forgotten root password.

This is the most complex method and while using this method, make sure you read commands twice before applying them as we will be dealing with **GRUB**.

Step 1: Enter GRUB Edit Mode

To enter **GRUB** edit mode, first, we have to reboot our system. When you see **GRUB 2** screen, press the **'e'** key to interrupt the boot process.

```

Red Hat Enterprise Linux (5.14.0-70.13.1.el9_0.x86_64) 9.0 (Plow)
Red Hat Enterprise Linux (0-rescue-c4d3dca7b2a14b5abf5e1b59d6488da0) 9.0+

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

```

RHEL Grub Boot Menu

Once you press 'e', it will show us kernel boot parameters.

```

load_video
set gfxpayload=keep
insmod gzio
linux ($root)/vmlinuz-5.14.0-70.13.1.el9_0.x86_64 root=/dev/mapper/rhel-root r\
o crashkernel=1G-4G:192M,4G-64G:256M,64G-:512M resume=/dev/mapper/rhel-swap rd\
.lvm.lv=rhel/root rd.lvm.lv=rhel/swap rhgb quiet
initrd ($root)/initramfs-5.14.0-70.13.1.el9_0.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.

```

Kernel Boot Parameters

Step 2: Edit Kernel Boot Parameters

Once you enter **Kernel** boot parameters, go to the end of the line which starts with **linux**. The easiest way to do that is first to go to the line that starts with **linux** and press **CTRL + e** to jump to the end of the line.

```

load_video
set gfxpayload=keep
insmod gzio
linux ($root)/vmlinuz-5.14.0-70.13.1.el9_0.x86_64 root=/dev/mapper/rhel-root r\
o crashkernel=1G-4G:192M,4G-64G:256M,64G-:512M resume=/dev/mapper/rhel-swap rd\
.lvm.lv=rhel/root rd.lvm.lv=rhel/swap rhgb quiet
initrd ($root)/initramfs-5.14.0-70.13.1.el9_0.x86_64.img

```

View Kernel Boot Parameters

Once you are at the end of the line, add **rd.break** and press **CTRL + x** to start the system with changed parameters.

```
load_video
set gfxpayload=keep
insmod gzio
linux ($root)/vmlinuz-5.14.0-70.13.1.el9_0.x86_64 root=/dev/mapper/rhel-root r\
o crashkernel=1G-4G:192M,4G-64G:256M,64G-:512M resume=/dev/mapper/rhel-swap rd\
.lvm.lv=rhel/root rd.lvm.lv=rhel/swap rhgb quiet rd.break
initrd ($root)/initramfs-5.14.0-70.13.1.el9_0.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.

Edit Kernel Boot Parameters

Step 3: Reset Forgotten Root Password

You will be given an emergency mode prompt. From here, we will be mounting our drives, entering into chroot environment, and changing our root password. Press **Enter** and the **sh-5.1** prompt will appear for further process.

```
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.

Press Enter for maintenance
(or press Control-D to continue):
sh-5.1#
```

RHEL Emergency Mode Prompt

By default, the file system is mounted as read-only under **/sysroot** directory. By using the given commands, we will be remounting them to make them writable and change our password.

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

After mounting drives, let's enter into **chroot** environment which will allow us to make changes directly to system files.

```
# chroot /sysroot
```

Finally, we can change our root password by utilizing the given command:

```
# passwd
```

```
sh-5.1# passwd
Changing password for user root.
New password:
Retype new password:
passwd: all authentication tokens updated successfully.
sh-5.1# _
```

Change Forgotten Root Password in RHEL 9

After changing the password, let's enable **SELinux** relabeling process on the next system boot.

```
# touch /.autorelabel
```

Important: We are not running any scripts here, so make sure you use `/.autorelabel` correctly.

After changing the password and relabeling, let's exit chroot environment by the given command:

```
# exit
```

Similarly, to exit from the sh-5.1 prompt, we will be using the given command:

```
# exit
```

Step 4: Verify Root Password

To verify whether we have successfully changed our root password or not, log in as a normal user and open the terminal emulator and run an interactive shell as **root**, utilize the given command:

```
$ su
```

Enter the newly configured root password. To print the username associated with a current user ID, we will be using the given command:

```
# whoami
```

Check Root User Login. And it will return as "**root**".

Note: You can also use below alternate method for resetting the root password

1. Select the boot entry you wish to edit with the arrow keys.
2. Select the entry you wish to edit by pressing **e**.
3. Use the arrow keys to go to select the line beginning with `linux`, `linux16`, or `linuxefi`.
4. Go to the end of that line and include a space and the following `rw init=/bin/bash`.
5. Then use `passwd` command to reset root password and follow same instructions.



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