

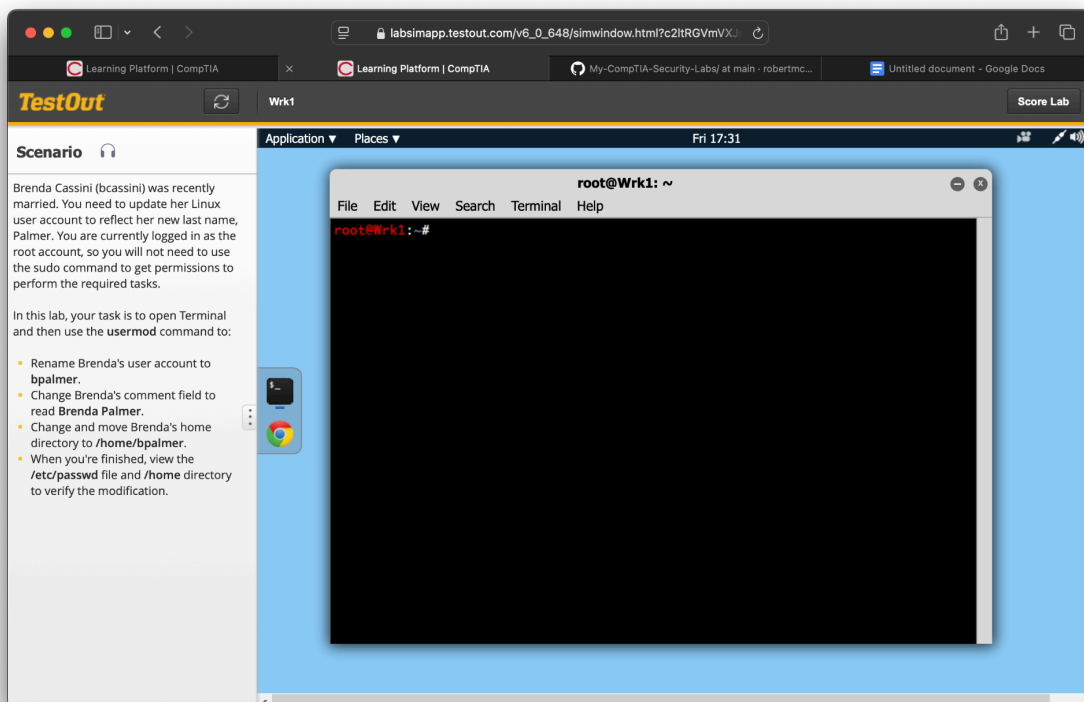
## TestOut CompTIA Security + LAB 4.6.6: Renaming Users On a Linux System

In this lab, I will be renaming a user that is currently registered on a Linux system. The scenario for this lab is as follows:

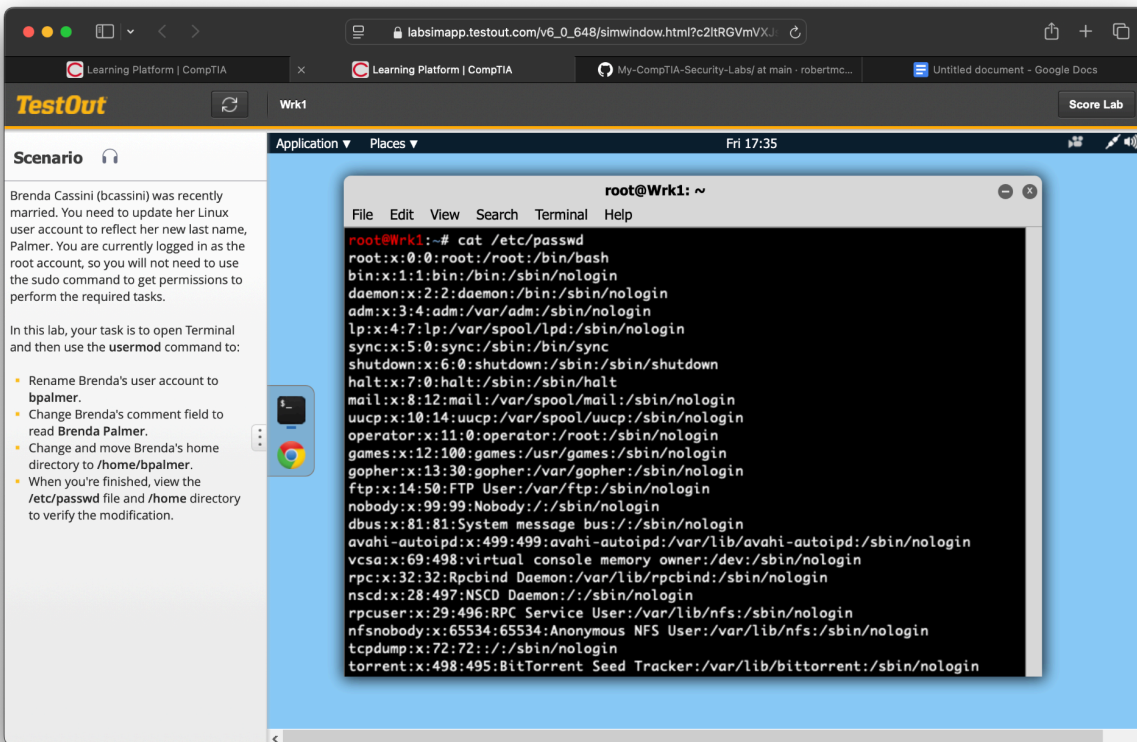
“Brenda Cassini (bcassini) was recently married. You need to update her Linux user account to reflect her new last name, Palmer. You are currently logged in as the root account, so you will not need to use the sudo command to get permissions to perform the required tasks.

In this lab, your task is to open Terminal and then use the **usermod** command to:

1. Rename Brenda's user account to **bpalmer**.
2. Change Brenda's comment field to read **Brenda Palmer**.
3. Change and move Brenda's home directory to **/home/bpalmer**.
4. When you're finished, view the **/etc/passwd** file and **/home** directory to verify the modification.”



To begin with, the “bcassini” user is registered on this Linux system in the /etc/passwd file. Let’s first query the /etc/passwd file to confirm that she indeed exists. To do that we will need use the “cat” command to display the contents of that file in the terminal:



The screenshot shows a web browser window with the URL `labsimapp.testout.com/v6_0_648/simwindow.html?c2ltRGVmVX...`. The browser has several tabs open, including "Learning Platform | CompTIA" and "My-CompTIA-Security-Labs/ at main · robertmc...". The main content area displays a "TestOut" scenario titled "Scenario" with a description of a task involving a user named Brenda Cassini. The task instructions are as follows:

- Brenda Cassini (bcassini) was recently married. You need to update her Linux user account to reflect her new last name, Palmer. You are currently logged in as the root account, so you will not need to use the sudo command to get permissions to perform the required tasks.
- In this lab, your task is to open Terminal and then use the `usermod` command to:
- Rename Brenda's user account to `bpalmer`.
- Change Brenda's comment field to read `Brenda Palmer`.
- Change and move Brenda's home directory to `/home/bpalmer`.
- When you're finished, view the `/etc/passwd` file and `/home` directory to verify the modification.

The terminal window, titled "root@Wrk1: ~", shows the output of the `cat /etc/passwd` command. The output lists the system's user accounts, including the `bcassini` user, which is highlighted in red in the original image. The `bcassini` user is located at the 14th line of the output, with a home directory of `/var/ftp` and a shell of `/sbin/nologin`.

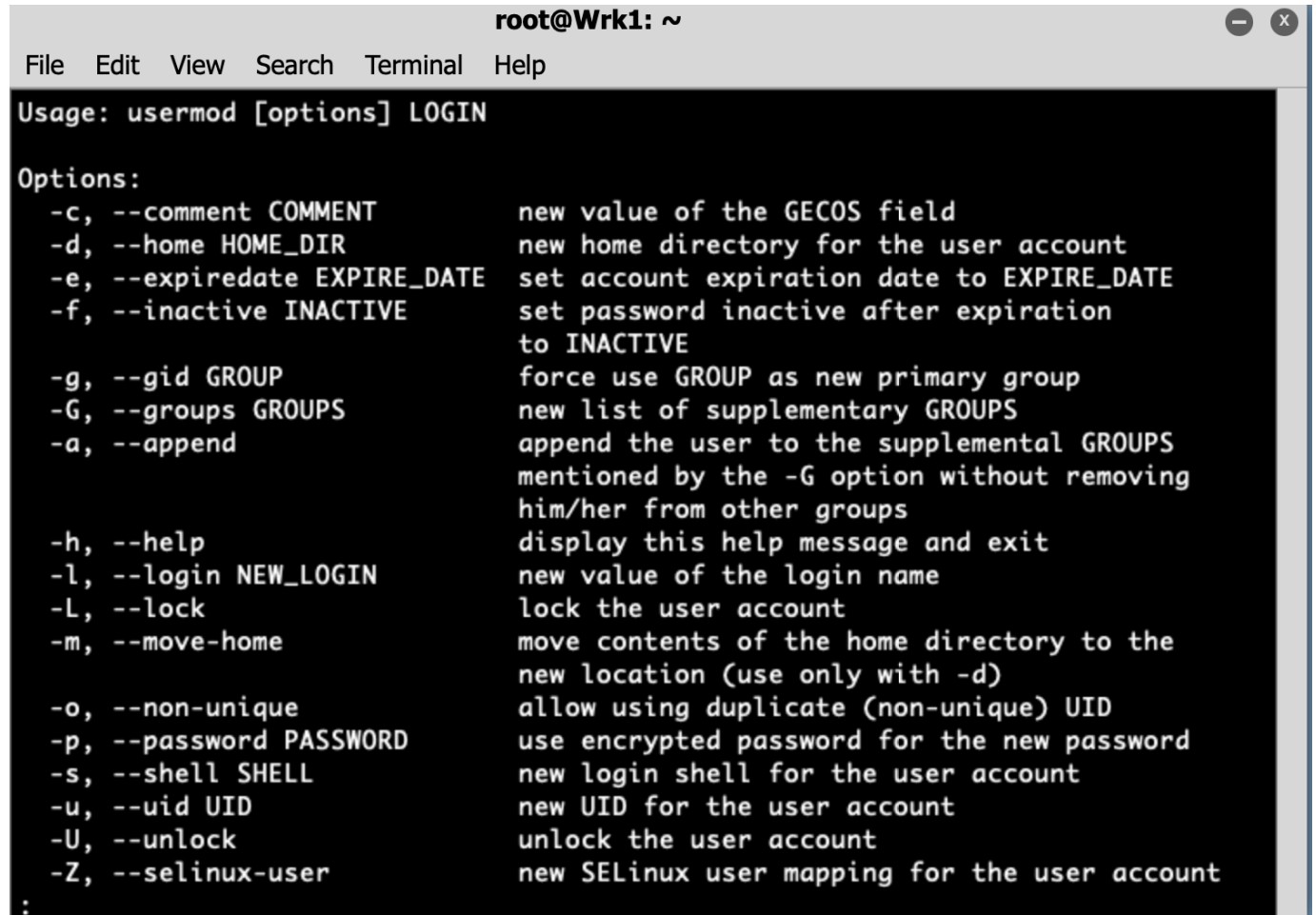
```
root@Wrk1:~# cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
bin:x:1:1:bin:/bin:/sbin/nologin
daemon:x:2:2:daemon:/bin:/sbin/nologin
adm:x:3:4:adm:/var/adm:/sbin/nologin
lp:x:4:7:lp:/var/spool/lpd:/sbin/nologin
sync:x:5:0:sync:/sbin:/bin/sync
shutdown:x:6:0:shutdown:/sbin:/sbin/shutdown
halt:x:7:0:halt:/sbin:/sbin/halt
mail:x:8:12:mail:/var/spool/mail:/sbin/nologin
uucp:x:10:14:uucp:/var/spool/uucp:/sbin/nologin
operator:x:11:0:operator:/root:/sbin/nologin
games:x:12:100:games:/usr/games:/sbin/nologin
gopher:x:13:30:gopher:/var/gopher:/sbin/nologin
ftp:x:14:50:FTP User:/var/ftp:/sbin/nologin
nobody:x:99:99:Nobody:/:/sbin/nologin
dbus:x:81:81:System message bus:/:/sbin/nologin
avahi-autoipd:x:499:499:avahi-autoipd:/var/lib/avahi-autoipd:/sbin/nologin
vcsa:x:69:498:virtual console memory owner:/dev:/sbin/nologin
rpc:x:32:32:Rpcbind Daemon:/var/lib/rpcbind:/sbin/nologin
nscd:x:28:497:NSCD Daemon:/:/sbin/nologin
rpcuser:x:29:496:RPC Service User:/var/lib/nfs:/sbin/nologin
nfsnobody:x:65534:65534:Anonymous NFS User:/var/lib/nfs:/sbin/nologin
tcpdump:x:72:72:/:/sbin/nologin
torrent:x:498:495:BitTorrent Seed Tracker:/var/lib/bittorrent:/sbin/nologin
```

I can see that Brenda Cassini is located in this file! Here’s a zoomed in screenshot:

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Fri November 15th 2024

```
root@Wrk1: ~  
File Edit View Search Terminal Help  
torrent:x:498:495:BitTorrent Seed Tracker:/var/lib/bittorrent:/sbin/nologin  
avahi:x:497:494:avahi-daemon:/var/run/avahi-daemon:/sbin/nologin  
saslauth:x:496:493:"Saslauthd user":/var/empty/saslauth:/sbin/nologin  
mailnull:x:47:492::/var/spool/mqueue:/sbin/nologin  
smmisp:x:51:491::/var/spool/mqueue:/sbin/nologin  
mysql:x:27:490:MySQL Server:/var/lib/mysql:/bin/bash  
haldaemon:x:68:489:HAL daemon:/sbin/nologin  
sshd:x:74:488:Privilege-separated SSH:/var/empty/sshd:/sbin/nologin  
wadams:x:500:500:Will Adams:/home/wadams:/bin/bash  
rcronn:x:501:501:Robert Cronn:/home/rcronn:/bin/bash  
vedwards:x:502:502:Vera Edwards:/home/vedwards:/bin/bash  
cflynn:x:503:503:Corey Flynn:/home/cflynn:/bin/bash  
mbrown:x:504:504:Maggie Brown:/home/mbrown:/bin/bash  
placy:x:505:505:Peter Placy:/home/placy:/bin/bash  
bcassini:x:506:506:Brenda Cassini:/home/bcassini:/bin/bash  
aespinoza:x:507:507:Arturo Espinoza:/home/aespinoza:/bin/bash  
bkahn:x:508:508:Rhumika Khan:/home/bkahn:/bin/bash  
schawla:x:509:509:Salman Chawla:/home/schawla:/bin/bash  
  
root@Wrk1:~# _
```

Awesome, we confirmed she indeed exists. We can proceed forward with our task of changing her username by using the “usermod” command built in GNU/Linux. Since not only do we have to change her username but we also need to change her GECOS comment field and her home directory. To see what we can do with the usermod command lets query the man-db to see how to use it. Type in “man usermod” to receive the following output:

A screenshot of a terminal window titled 'root@Wrk1: ~'. The window has a menu bar with 'File', 'Edit', 'View', 'Search', 'Terminal', and 'Help'. The terminal content shows the 'Usage: usermod [options] LOGIN' and a list of options. The options are listed in two columns. The first column contains short and long flags, and the second column contains their descriptions. The options include: -c, --comment COMMENT (new value of the GECOS field), -d, --home HOME\_DIR (new home directory for the user account), -e, --expiredate EXPIRE\_DATE (set account expiration date to EXPIRE\_DATE), -f, --inactive INACTIVE (set password inactive after expiration to INACTIVE), -g, --gid GROUP (force use GROUP as new primary group), -G, --groups GROUPS (new list of supplementary GROUPS), -a, --append (append the user to the supplemental GROUPS mentioned by the -G option without removing him/her from other groups), -h, --help (display this help message and exit), -l, --login NEW\_LOGIN (new value of the login name), -L, --lock (lock the user account), -m, --move-home (move contents of the home directory to the new location (use only with -d)), -o, --non-unique (allow using duplicate (non-unique) UID), -p, --password PASSWORD (use encrypted password for the new password), -s, --shell SHELL (new login shell for the user account), -u, --uid UID (new UID for the user account), -U, --unlock (unlock the user account), and -Z, --selinux-user (new SELinux user mapping for the user account). The terminal ends with a colon ':'.

```
root@Wrk1: ~
File Edit View Search Terminal Help

Usage: usermod [options] LOGIN

Options:
  -c, --comment COMMENT      new value of the GECOS field
  -d, --home HOME_DIR        new home directory for the user account
  -e, --expiredate EXPIRE_DATE set account expiration date to EXPIRE_DATE
  -f, --inactive INACTIVE    set password inactive after expiration
                              to INACTIVE
  -g, --gid GROUP            force use GROUP as new primary group
  -G, --groups GROUPS        new list of supplementary GROUPS
  -a, --append               append the user to the supplemental GROUPS
                              mentioned by the -G option without removing
                              him/her from other groups
  -h, --help                 display this help message and exit
  -l, --login NEW_LOGIN      new value of the login name
  -L, --lock                 lock the user account
  -m, --move-home            move contents of the home directory to the
                              new location (use only with -d)
  -o, --non-unique           allow using duplicate (non-unique) UID
  -p, --password PASSWORD    use encrypted password for the new password
  -s, --shell SHELL          new login shell for the user account
  -u, --uid UID              new UID for the user account
  -U, --unlock               unlock the user account
  -Z, --selinux-user         new SELinux user mapping for the user account
:
```

We can see here that we can accomplish everything we are asked to do with this command! The requirement of changing her GECOS comment field can be done by using the “-c” flag , “-l “ flag to change their login name , “-m” and “-d” flags to change the HOME directory from “/home/bcassini” to “/home/bpalmer.”

Putting that all together we can feed in the following command into our shell (without sudo because we are root already)

```
# usermod -l bpalmer bcassini -m -c "Brenda Palmer" -d  
/home/bpalmer
```

After entering the above and pressing enter you should receive no output from this command and the shell should be prompting you for your next command. This is how we know the command was executed successfully (see screenshot below)

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```
root@Wrk1:~# usermod -l bpalmer bcassini -m -c "Brenda Palmer" -d /home/bpalmer
root@Wrk1:~#
```

Excellent! Now the lab asks us to verify that the changes we made took place. In order to do that we must query the /etc/passwd file and look for her new details. We can achieve that by redoing our first step with “cat /etc/passwd”:

```
bpalmer:x:506:506:Brenda Palmer:/home/bpalmer:/bin/bash
aespinoza:x:507:507:Arturo Espinoza:/home/aespinoza:/bin/bash
bkahn:x:508:508:Bhumika Khan:/home/bkahn:/bin/bash
schawla:x:509:509:Salman Chawla:/home/schawla:/bin/bash

root@Wrk1:~# _
```

We can see here that Brenda’s username has been successfully updated! We can also check the /home directory by listing it out and verify that /home/bpalmer was created when we did the usermod command:

```
root@Wrk1:~# ls -la /home
total 44
drwxr-xr-x. 2 root root 4096 Oct 01 2021 .
dr-xr-xr-x. 2 root root    0 Aug 12 08:49 ..
drwxr-xr-x. 2 aespinoza aespinoza 4096 Aug 12 08:49 aespinoza
drwxr-xr-x. 2 bkahn bkahn 4096 Aug 12 08:49 bkahn
drwxr-xr-x. 2 bpalmer bcassini 4096 Aug 12 08:49 bpalmer
drwxr-xr-x. 2 cflynn cflynn 4096 Aug 12 08:49 cflynn
drwxr-xr-x. 2 mbrown mbrown 4096 Aug 12 08:49 mbrown
drwxr-xr-x. 2 placy placy 4096 Aug 12 08:49 placy
drwxr-xr-x. 2 rcronn rcronn 4096 Aug 12 08:49 rcronn
drwxr-xr-x. 2 schawla schawla 4096 Aug 12 08:49 schawla
drwxr-xr-x. 2 vedwards vedwards 4096 Aug 12 08:49 vedwards
drwxr-xr-x. 2 wadams wadams 4096 Aug 12 08:49 wadams

root@Wrk1:~# _
```

AWESOME! Lab finished !

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Fri November 15th 2024

TestOut

Wrk1

Application ▾ Places ▾ Fri 17:57

Scenario 🎧

Brenda Cassini (bcassini) was recently married. You need to update her Linux user account to reflect her new last name, Palmer. You are currently logged in as the root account, so you will not need to use the sudo command to get permissions to perform the required tasks.

In this lab, your task is to open Terminal and then use the **usermod** command to:

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root@Wrk1: ~

File Edit View Search Terminal Help

rcronn:x:501:501:Robert Cronn:/home/rcronn:/bin/bash  
vedwards:x:502:502:Vera Edwards:/home/vedwards:/bin/bash  
cflynn:x:503:503:Corey Flynn:/home/cflynn:/bin/bash

Submit for a Score?

Are you ready to score your lab? Once you click **Score** you won't be able to make any more changes to your work.

Cancel Score

drwxr-xr-x. 2 mbrown mbrown 4096 Aug 12 08:49 mbrown  
drwxr-xr-x. 2 placy placy 4096 Aug 12 08:49 placy  
drwxr-xr-x. 2 rcronn rcronn 4096 Aug 12 08:49 rcronn  
drwxr-xr-x. 2 schawla schawla 4096 Aug 12 08:49 schawla  
drwxr-xr-x. 2 vedwards vedwards 4096 Aug 12 08:49 vedwards  
drwxr-xr-x. 2 wadams wadams 4096 Aug 12 08:49 wadams  
root@Wrk1:~#

root@Wrk1: ~

## Lab Report

Time Spent: 26:25

**Score: 4/4 (100%)**

TASK SUMMARY

**Required Actions**

- ✓ Rename the bcassini user account to bpalmer
- ✓ Change the comment field to Brenda Palmer
- ✓ Change the home directory to /home/bpalmer
- ✓ Move the home directory contents

drwxr-xr-x. 2 wadams wadams 4096 Aug 12 08:49 wadams  
root@Wrk1:~#