Ticket: Add Users to Linux Host

Andrew Shedd

Practical Help Desk TCM Security Project

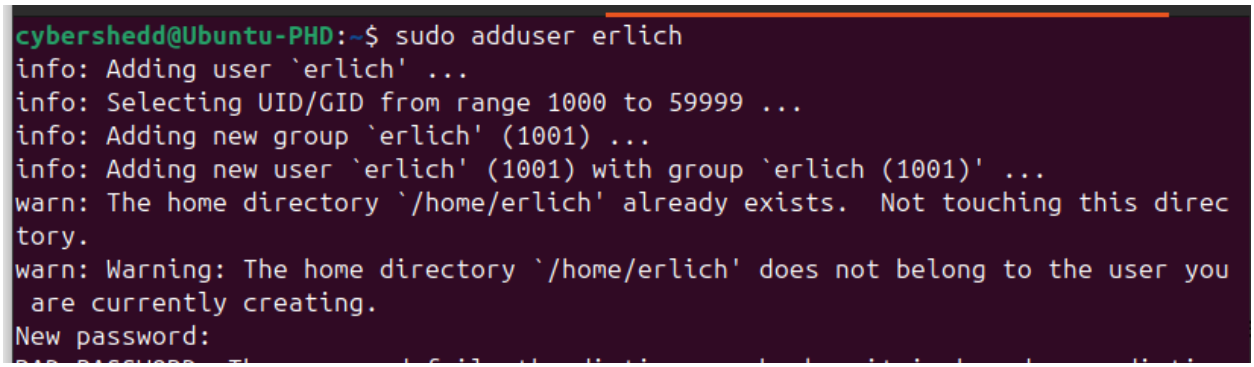
Ticket —

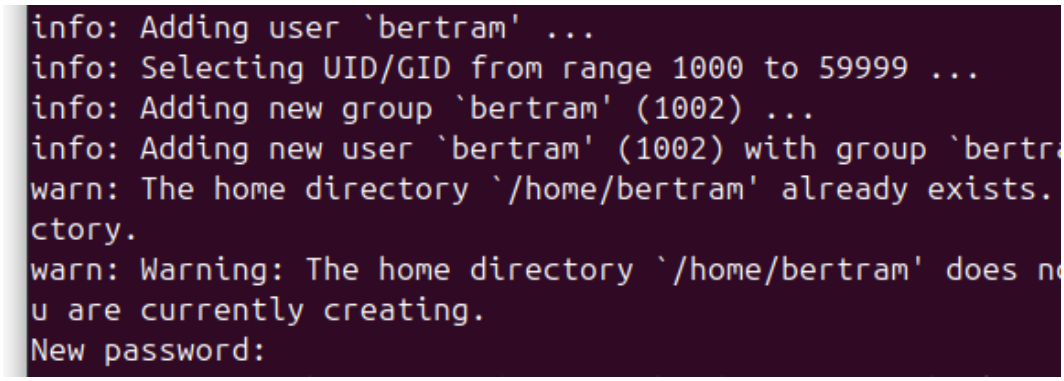
Hello Admin, please ass two new users to the Ubuntu Linux Host, Bertram and Erlich (you can leave all additional details such as last name, room number, and phone numbers blank. Please create a password for each of them on their first login. Also, please create a new folder in the root directory called confidential. Make the root user and the lab group, the owner of the folder with full permissions; however, everyone else on the computer has no permissions, so they can't access the folder.

Objectives:

1. Create 2 new users named Erlich and Bertram.
2. Create a password and require a reset on their first logon
3. Create a new folder called “confidential”.
4. Make root the owner of the file.
5. Create a group and put Erlich and Bertram into the group.
6. Change the group ownership of the file to the group with the new users.
7. Change the folders permissions to allow root and the group full permissions and no permissions for other users.

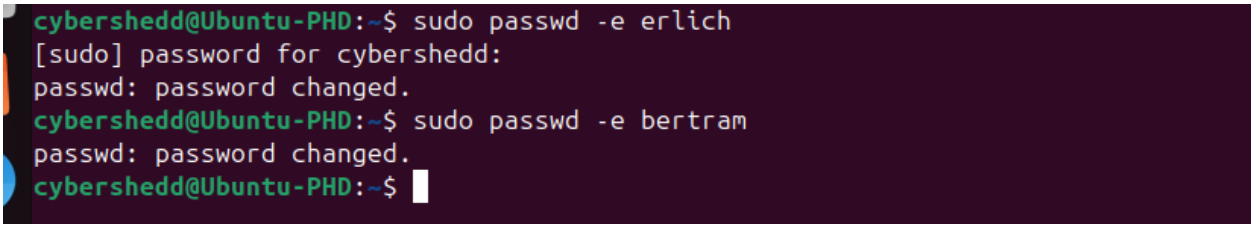
Create New Users



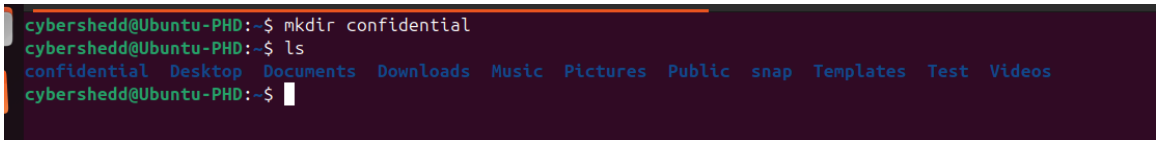


Require a password change on first logon

- Force a password reset when the users first logon.



Create a new folder named Confidential



Make root the owner of the confidential directory

```
cybershedd@Ubuntu-PHD:~$ chown root confidential/
chown: changing ownership of 'confidential/': Operation not permitted
cybershedd@Ubuntu-PHD:~$ sudo chown root confidential/
[sudo] password for cybershedd:
cybershedd@Ubuntu-PHD:~$
```

- Confirm the change

```
cybershedd@Ubuntu-PHD:~$ ls -la
total 84
drwxr-x--- 17 cybershedd cybershedd 4096 Oct 30 12:43 .
drwxr-xr-x  5 root       root       4096 Oct 26 16:15 ..
-rw-------  1 cybershedd cybershedd 1124 Oct 27 21:17 .bash_history
-rw-r--r--  1 cybershedd cybershedd  220 Mar 31  2024 .bash_logout
-rw-r--r--  1 cybershedd cybershedd 3771 Mar 31  2024 .bashrc
drwx------ 13 cybershedd cybershedd 4096 Oct 27 21:14 .cache
drwxrwxr-x  2 root       cybershedd 4096 Oct 30 12:43 confidential
drwx------ 14 cybershedd cybershedd 4096 Oct 30 12:38 .config
drwxr-xr-x  2 cybershedd cybershedd 4096 Oct 26 14:44 Desktop
```

Create a Group and add the 2 users

- Create a group called “lab” and set the GID to 200

```
cybershedd@Ubuntu-PHD:~$ sudo addgroup --gid 200 lab
info: Adding group `lab' (GID 200) ...
```

- Add erlich and bertram into the lab group and confirm

```
cybershedd@Ubuntu-PHD:~$ sudo usermod -aG lab erlich
cybershedd@Ubuntu-PHD:~$ sudo usermod -aG lab bertram
cybershedd@Ubuntu-PHD:~$ groups bertram
bertram : bertram users lab
cybershedd@Ubuntu-PHD:~$ groups erlich
erlich : erlich users lab
cybershedd@Ubuntu-PHD:~$
```

Change the confidential Directory Group ownership to the ‘lab’ group

```
cybershedd@Ubuntu-PHD:~$ sudo chgrp lab confidential/
```

```
drwx------ 13 cybershedd cybershedd 4096 Oct 27 21:14 .cache
drwxrwxr-x  2 root       lab        4096 Oct 30 12:43 confidential
drwx------ 14 cybershedd cybershedd 4096 Oct 30 12:38 .config
drwxr-xr-x  2 cybershedd cybershedd 4096 Oct 26 14:44 Desktop
```

Change permissions of confidential to full permissions for root and lab group and 0 permissions for anyone else

```
cybershedd@Ubuntu-PHD:~$ sudo chmod 770 confidential/
cybershedd@Ubuntu-PHD:~$ ls -la
total 84
drwxr-x--- 17 cybershedd cybershedd 4096 Oct 30 12:43 .
drwxr-xr-x  5 root       root       4096 Oct 26 16:15 ..
-rw-------  1 cybershedd cybershedd 1124 Oct 27 21:17 .bash_history
-rw-r--r--  1 cybershedd cybershedd  220 Mar 31  2024 .bash_logout
-rw-r--r--  1 cybershedd cybershedd 3771 Mar 31  2024 .bashrc
drwx------ 13 cybershedd cybershedd 4096 Oct 27 21:14 .cache
drwxrwx---  2 root       lab        4096 Oct 30 12:43 confidential
drwx------ 14 cybershedd cybershedd 4096 Oct 30 12:38 .config
drwxr-xr-x  2 cybershedd cybershedd 4096 Oct 26 14:44 Desktop
drwxr-xr-x  2 cybershedd cybershedd 4096 Oct 26 14:44 Documents
```

Summary

What did I learn?

- How to create new users on a local system in linux.
- Create a temp password and set the password to expire on the next logon.
- Created a directory named confidential and used commands to modify user ownership, group ownership and permissions on directories.
- I also learned to create groups.

Why is this important?

- It is important to allow the least privileged to sensitive documents and folders. Groups and permissions allow for this to happen and are much more streamlined than assigning permissions for each user individually.