Challenge Lab 6

Total points: 35

Time limit: 40 minutes

Screenshots made after 40 minutes = 2 point deduction for each minute or partial minute over the time limit.

Purpose

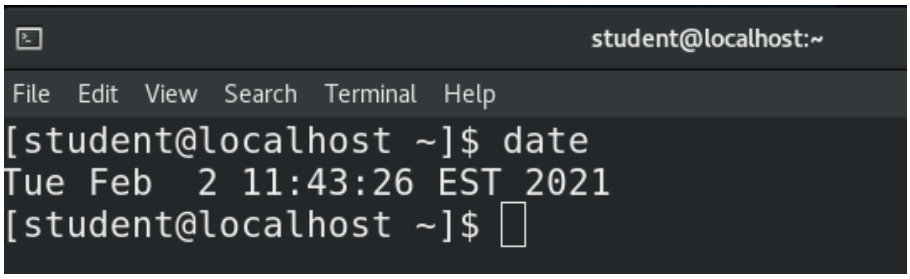
This challenge lab focuses on practicing the different redirection operators, file ownership and permissions. To practice those commands you will also get a chance to get practice with adding users.

I recommend you read through the entire lab first to get a sense of what is trying to be accomplished. That will help you determine the overall context so that if you are unsure about what I am asking you to do, you can ask for clarification before starting.

Make a reservation on the Redhat Admin I pod, log in to the KIOSK (password= redhat)
Start the workstation virtual machine: **rht-vmctl start workstation**

*After the workstation is up and running you can ssh to the work station (it may take a minute or two)**.***

Open a terminal window and type*:* **date**
Use the Netlab screenshot option and take a screenshot



This is your start time. Your time starts now

Task 1: Make sure you have a clear history file

1) Login to student@workstation on netlab
2) Type **history -c**
3) Type the command that tells you your currently location in the directory structure

Task 2: Create New User (9 points)

For this lab we need 2 users. Each will have a different history file. The Root user will also have a history file. Wanna guess how many history file screenshots you'll need? :)

1) Display your history file

   Take a screenshot in Netlabs and call it **T2_1a**

   a) in the comment box of the screenshot tell me who's history file you are looking at **(1 point)**.

2) We need to add a new user. But before we do, I want you to orient your self to make sure you understand what is happening.

   a) Type the command to switch to the root user **(1 point)**

   b) Type in the command to determine your present working directory **(1 point).**

   c) Type the command that shows you who you are **(1 point)**

   d) Display your history file again

   Take a screenshot in Netlabs and call it **T2_2d**.

   e) In the comment box of the screenshot tell me who's history file you are looking at **(1 point).**

3) Time to create that second user. (before you start, verify your present working directory is **/root**).

   a) Create a new user account for Francis Cecil Sumner (look him up, if you like). The username will be **fsumner** and the password will be **FSumner123$**. **(2 points)**

   b) Use the **chage** command and set the minimum number of days between changing passwords to **7** and the maximum number of days the password is valid to **90**. **(2 points).**

      i. full points if you can set both at the same time

      ii. ½ points if you can accomplish the task

Task 3: Verify Your Work So Far (4 points)

1) Use the **tail** command to show just fsunmer's entry in the /etc/passwd file and the /etc/shadow **(2 points).**

   1. full points if you can use the tail command once and view both files
   2. ½ points if you accomplish the task.

```
==> /etc/passwd <==
fsumner:x:1002:1003::/home/fsumner:/bin/bash

==> /etc/shadow <==
fsumner:!!:18687:7:90:7:::
```

2) Repeat this task, except this time redirect the output to a file called **new_user_RootAcct1**. **(1 point)**

3) Repeat this task, except this time use the command the send the output to the terminal and to a file at the same time. Name that file: **new_user_RootAcct2. (1 point)**

   **as a tip, review chapter 5 for the command.

4) Verify that these files exist by listing the contents of the **/root** directory. Use the option flag for the long listing format **(1 point).**

   Take a screenshot in Netlabs and name the screenshot **T3_4**.

```
-rw-r--r--. 1 root root  113 Feb 28 20:30 new_user_RootAcct1
-rw-r--r--. 1 root root  113 Feb 28 20:30 new_user_RootAcct2
```

Task 4: Let's Switch over to fsumner's account and do a little work (8 points)

You should still be in the root account. Verify this and if you are not switch to this account before starting the next task.

1) From the root user account, switch to the user fsumner. **(1 point)**
   a) Verify your present working directory is **/home/fsumner (1 point)** and you are currently acting as fsumner (tip: review chapter 2 for a reminder of how to do that) **(1 point)**.
2) Francis wants to create a few different files to store facts and trivia about his famous psychoanalyst colleagues. Create the following empty files:

   Sigmund_Freud

   Carl_Jung

   Karen_Horney

   Erik_Erikson

   Otto_Rank

   Frantz_Fanon

   (3 points)
3) List the contents of the directory in long listing format and redirect the output to a file called: **Famous_psychoanalysts**. **(2 points)**
4) View your current history and redirect the output to a file called **fsumner_history**.

   Take a netlab screenshot. Call it: **T4_4**

Task 5: Now for some more advanced work (14 points)

Exit out of the fsumner account and return to the root user account.

Verify that your present working directory is /root and you are the user root.

1) From the root user account, create a file called **Multiple_users_work (1 point)**.
2) Using the **cat** command and the correct redirection operator (tip: review chapter 5), *append* the contents of the **Famous_psychoanalysts** file and the **fsumner_history** to the **Multiple_users_work** file. **(5 points)**

   full points if you can do both files at once using brace expansion

½ points if you can correctly accomplish this.

3) Using the correct command and the correct redirection operator, *append* the history of the root user to the **Multiple_users_work** file. **(2 points)**

4) Change the groupowner of the **Multiple_users_work** file to student **(1 points)**

5) Change to file permissions of the **Multiple_users_work** file to allow group members to write to the file. **(1 point)**

6) Move the file to the home directory of student and call it **Multiple_users_work_Student. (2 points)**

7) Run the **history|less** command and take screenshots of each screen

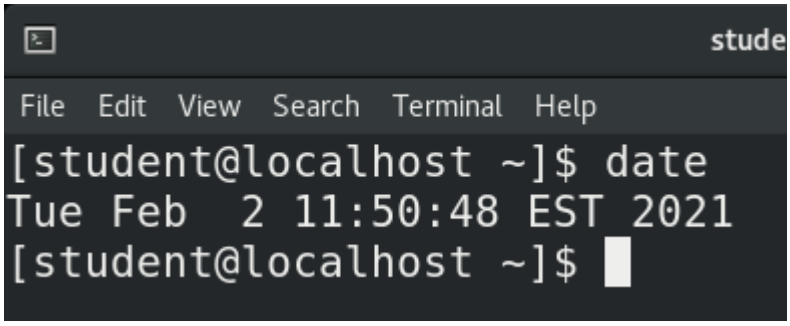
Take a Screenshot in netlabs showing this result. Call it: **Task5_7a,b,etc.**

8) Exit the root user account. Verify you are the user student and make sure your present working directory is **/home/student/**

9) Append the command history is user student to the **Multiple_users_work_Student** file. **(2 points)**

Type: **date**

Use the Netlab screenshot option and take a screenshot



This is your finish time

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Submit your work

Run the **less| Multiple_users_work_Student** command and take screenshots of each screen

There should be minimum of 6 screenshots. 5 from earlier in the lab and the screenshot(s) showing the contents of the **Multiple_users_work_Student** file.

Submit your reservation number to Bb.