

Linux Fundamentals Part 2

Continue your learning Linux journey with part two. You will be learning how to log in to a Linux machine using SSH, how to advance your commands, file system interaction.

Task 2 Accessing Your Linux Machine Using SSH (Deploy)

I ssh into the machine

Command: `ssh tryhackme@10.10.84.73`

Password: `tryhackme`

```
root@ip-10-10-174-161:~# ssh tryhackme@10.10.84.73
The authenticity of host '10.10.84.73 (10.10.84.73)' can't be established.
ECDSA key fingerprint is SHA256:XN+wTtfU6IAkM+NbTav2m/yHeivKzL3eDKG4OI3BvY0.
Are you sure you want to continue connecting (yes/no)? yes
Warning: Permanently added '10.10.84.73' (ECDSA) to the list of known hosts.
tryhackme@10.10.84.73's password:
Welcome to Ubuntu 20.04.2 LTS (GNU/Linux 5.4.0-1047-aws x86_64)
```

```
tryhackme@linux2:~$  
```

Task 3 Introduction to Flags and Switches

Question	Answer
What directional arrow key would we use to navigate down the manual page?	down
What flag would we use to display the output in a "human-readable" way?	-h

Command: `man ls`

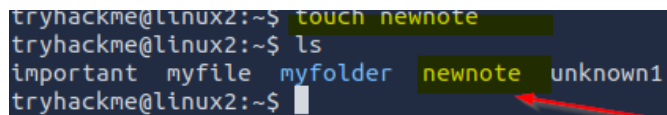
```
-h, --human-readable
    with -l and -s, print sizes like 1K 234M 2G etc.
```

Task 4 Filesystem Interaction Continued

How would you create the file named "newnote"?

Command & Answer: `touch newnote`

```
tryhackme@linux2:~$ touch newnote
tryhackme@linux2:~$ ls
important myfile myfolder newnote unknown1
tryhackme@linux2:~$
```



On the deployable machine, what is the file type of "unknown1" in "tryhackme's" home directory?

I navigated to the home directory and then to the tryhackme directory. Once there, I listed the files in the directory to locate the unknown1 file.

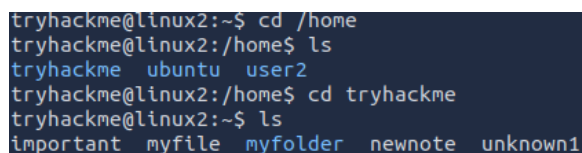
Command: `cd /home`

Command: `ls`

Command: `cd tryhackme`

Command: `ls`

```
tryhackme@linux2:~$ cd /home
tryhackme@linux2:/home$ ls
tryhackme ubuntu user2
tryhackme@linux2:/home$ cd tryhackme
tryhackme@linux2:~$ ls
important myfile myfolder newnote unknown1
```

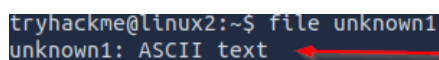


To find the type of file the unknown file is:

Command: `file unknown1`

Answer: `ASCII text`

```
tryhackme@linux2:~$ file unknown1
unknown1: ASCII text
```



How would we move the file "myfile" to the directory "myfolder"?

Command/Answer: `mv myfile myfolder`

```
tryhackme@linux2:~$ mv myfile myfolder
tryhackme@linux2:~$ ls
important myfolder newnote unknown1
tryhackme@linux2:~$ cd myfolder
tryhackme@linux2:~/myfolder$ ls
myfile
tryhackme@linux2:~/myfolder$
```

What are the contents of this file?

Command: `cat myfile`

Answer: `THM{FILESYSTEM}`

```
tryhackme@linux2:~/myfolder$ cat myfile
THM{FILESYSTEM}
```

Task 5 Permissions 101

On the deployable machine, who is the owner of "important"?

I used the find command to locate the "important" file, which I found to be located at /home/tryhackme.

Command: `find . -type f -name "important"`

```
find: './snap/core18/1885/var/lib/private': Permission denied
find: './snap/core18/1885/var/lib/snapd/void': Permission denied
find: './lost+found': Permission denied
find: './root': Permission denied
./home/tryhackme/important
find: './home/ubuntu/.cache': Permission denied
find: './home/ubuntu/.ssh': Permission denied
find: './etc/ssl/private': Permission denied
```

I navigated to the directory /home/tryhackme and listed out the permissions of the files here

Command: `ls -la`

Answer: `user2`

```
tryhackme@linux2:/$ cd home/
tryhackme@linux2:/home$ ls
tryhackme ubuntu user2
tryhackme@linux2:/home$ cd tryhackme
tryhackme@linux2:~$ ls -la
total 36
drwxr-xr-x 4 tryhackme tryhackme 4096 Mar 27 09:48 .
drwxr-xr-x 5 root root 4096 May 4 2021 ..
-rw-r--r-- 1 tryhackme tryhackme 220 May 4 2021 .bash_logout
-rw-r--r-- 1 tryhackme tryhackme 3771 May 4 2021 .bashrc
drwx----- 2 tryhackme tryhackme 4096 Mar 27 09:29 .cache
-rw-r--r-- 1 tryhackme tryhackme 807 May 4 2021 .profile
-rw-r--r-- 1 user2 user2 14 May 5 2021 important
drwxr-xr-x 2 tryhackme tryhackme 4096 Mar 27 09:48 myfolder
-rw-rw-r-- 1 tryhackme tryhackme 0 Mar 27 09:39 newnote
-rw-r--r-- 1 tryhackme tryhackme 17 May 4 2021 unknown1
tryhackme@linux2:~$
```

What would the command be to switch to the user "user2"?

Command/Answer: **su user2**

```
tryhackme@linux2:~$ su user2
Password:
user2@linux2:/home/tryhackme$
```

Output the contents of "important", what is the flag?

Command: **cat important**

Answer: **THM{SU_USER2}**

```
user2@linux2:/home/tryhackme$ cat important
THM{SU_USER2}
```

Task 6 Common Directories

Question	Answer
What is the directory path that would we expect logs to be stored in?	/var/log
What root directory is similar to how RAM on a computer works?	/tmp
Name the home directory of the root user	/root

END!!