Practice: Managing File Security from the Command Line

Guided exercise

In this lab, you will create a collaborative directory for pre-existing users.

Outcomes
A directory accessible by all members of the **ateam** group and a file created by Andy that can be modified by Alice.

Before you begin...
Reset your serverX system.

☐ 1. Log into the GNOME desktop on serverX as **student** with a password of **password**.

☐ 2. Open a window with a Bash prompt.

Select **Applications** > **Utilities** > **Terminal**.

☐ 3. Become the **root** user at the shell prompt.

```
[student@serverX ~]$ su -
Password: redhat
```

☐ 4. Run **lab permissions setup** which will create a shared group, **ateam**, with two new users, **andy** and **alice**. The password for these accounts is **password**

```
[root@serverX ~]# lab permissions setup
```

☐ 5. Create a directory in **/home** called **ateam-text**.

```
[root@serverX ~]# mkdir /home/ateam-text
```

☐ 6. Change the group ownership of the **ateam-text** directory to **ateam**.

```
[root@serverX ~]# chown :ateam /home/ateam-text
```

☐ 7. Ensure the permissions of **ateam-text** allows group members to create and delete files.

```
[root@serverX ~]# chmod g+w /home/ateam-text
```

☐ 8. Ensure the permissions of **ateam-text** forbids others from accessing its files.

```
[root@serverX ~]# chmod 770 /home/ateam-text
[root@serverX ~]$ ls -ld /home/ateam-text
drwxrwx---.  1 root ateam 6 Jan 23 12:50 /home/ateam-text
```

☐ 9. Exit the root shell and switch to the user **andy** with a password of **password**.

```
[root@serverX ~]# exit
[student@serverX ~]$ su - andy
Password: password
```

☐ 10. Navigate to the **/home/ateam-text** folder (remember to open a terminal window first).

```
[andy@serverX ~]$ cd /home/ateam-text
```

☐ 11. Create an empty file called **andyfile3**.

```
[andy@serverX ateam-text]$ touch andyfile3
```

☐ 12. Record the default user and group ownership of the new file and its permissions.

```
[andy@serverX ateam-text]$ ls -l andyfile3
-rw-rw-r--.  1 andy andy 0 Jan 23 12:59 andyfile3
```

☐ 13. Change the group ownership of the new file to **ateam** and record the new ownership and permissions.

```
[andy@serverX ateam-text]$ chown :ateam andyfile3
[andy@serverX ateam-text]$ ls -l andyfile3
-rw-rw-r--.  1 andy ateam 0 Jan 23 12:59 andyfile3
```

☐ 14. Exit the shell and switch to the user **alice** with a password of **password**.

```
[root@serverX ~]# exit
[student@serverX ~]$ su - alice
Password: password
```

☐ 15. Navigate to the **/home/ateam-text** folder.

```
[alice@serverX ~]$ cd /home/ateam-text
```

☐ 16. Determine **alice**'s privileges to access and/or modify **andyfile3**.

```
[alice@serverX ateam-text]$ echo "text" >> andyfile3
[alice@serverX ateam-text]$ cat andyfile3
text
```