

ECSC 325 – Web Server Administration

Spring 2025 – Section 200

Assignment 4– 40 points

Log on to your virtual machine as root using an SSH session and perform the following tasks:

Open a command terminal and add a user named `jpatalon` (all lowercase) to your server using the `useradd` command. Make this user account expire on July 4th 2121 using the `usermod` command. Create the group `admin` and add the user `jpatalon` to this group using the `groupadd` and `usermod` commands. Add the user `jpatalon` to the additional groups `root` and `wheel` as well. Set a random password of your choice for the user `jpatalon`. Also add user `jpatalon` to the sudoers file `/etc/sudoers.d/users`. (10 points)

Create a new user account for yourself, add yourself to the `admin` group, set a password for your new user account, and add your new user account to the sudoers list. (5 points)

Create a document with a copy of the exact commands you performed above. Also include any relevant lines containing information about the user `jpatalon` or the group `admin` from both the `/etc/passwd` and `/etc/group` files. Run the command `id jpatalon` and include the results in your document as well, along with the results from running the `id` command with your recently created account. (10 points)

Open a command terminal and run the command `ps -aux | head`. Copy all the results to your document. Briefly explain what the first four columns mean. Also run the `top` command, and examine its output. Press `q` to quit the `top` program. (4 points)

Run the commands `whereis chmod` and `which chmod`. Copy the output from each command to your document. Briefly explain the differences between what is returned by each command. (3 points)

Execute the command `df -h` and copy the results to your document. How much free space is on the root volume? (2 points)

Use the `find` command to locate the file `dnf.log` in the root filesystem. Where did you find the file? What command did you use to find the file? What is the last line in the file? (3 points)

Make sure your system is up to date, and has recently been rebooted. (3 points)

Save your file as `Lastname_Firstname_HW4` and submit your file(s) in D2L to the Dropbox folder `HW4`.

Download and run the check script using the following three commands:

```
curl -O https://jpatalon.cs.edinboro.edu/ecsc325/classfiles/assignment4check.sh
chmod a+x ./assignment4check.sh
./assignment4check.sh
```