Maintain Efficient Process Utilization on Linux

1 hour Free

Introduction

In this lab, you'll use the new commands you learned to do some process maintenance on a Linux virtual machine.

Head's up: You'll experience a delay as the labs initially load (particularly for Windows labs). So, please **wait a couple of minutes for the labs to load**. The grade is calculated when the lab is complete, so be sure to hit "**End Lab**" when you're done!

You'll have 60 minutes to complete this lab.

Start the lab

You'll need to start the lab before you can access the materials. To do this, click the green “Start Lab” button at the top of the screen.

After you click the “Start Lab” button, you will see a shell, where you will be performing further steps in the lab. You should have a shell that looks like this:

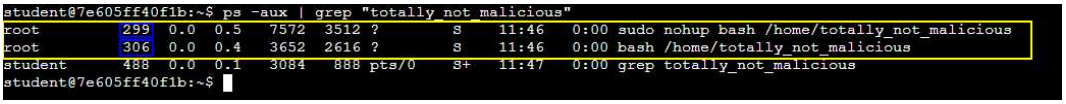
Terminating a specific process

The ps -aux command allows you to list all currently running processes on a Linux machine. However, the list of processes is often super long, which makes finding a specific process pretty tough. To filter the processes you're interested in, you can pipe the output of ps through grep.

There are two "malicious" processes currently running on your machine, called "totally_not_malicious". You can run ps and grep to find them, using this command:

```
ps -aux | grep "totally_not_malicious"
```

You should see output similar to this. The top two lines are the two processes, while the last line is the grep process you just used to search for them. Check out the four-digit numbers on the left of each of the rows; these are the process IDs.

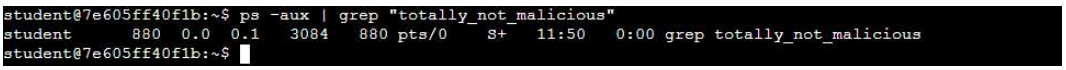


To stop a process, you can use the kill command. You need to use sudo to have permission to stop them. You also need to specify the ID of the process, which will likely be different on your machine than what's shown above (the ID is outlined in light blue):

```
sudo kill [PROCESS ID]
```

After killing the processes, you can verify that they're no longer running by running the original command again:

```
ps -aux | grep "totally_not_malicious"
```



Click Check my progress to verify the objective.

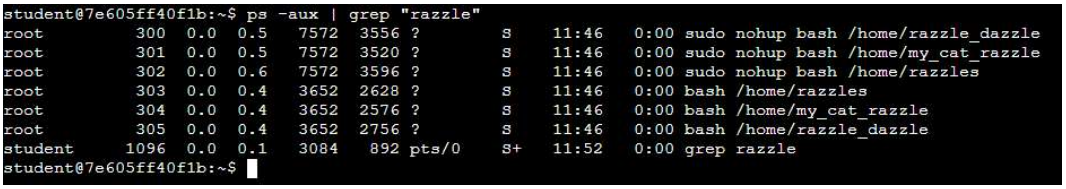
Stop the malicious processes

Terminating multiple processes

There are also multiple processes running on your computer containing the word "razzle". You can find them in the same way that you found the previous process using ps. Because grep doesn't look for full matches, it can be used to find any process that contains a specific substring:

```
ps -aux | grep "razzle"
```

The below shows all six processes that contain the word "razzle". (Again, you can ignore the last process because it's the process running grep.)



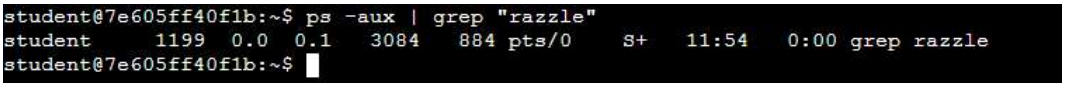
To kill each of the processes, you can use the same kill command as before, substituting in each process ID:

```
sudo kill [PROCESS ID]
```

To verify that the processes were successfully stopped, you can use the same command you used to find them in the first place:

```
ps -aux | grep "razzle"
```

You should only see the process for the grep command, indicating that the other processes are no longer running:



Click Check my progress to verify the objective.

Stop the razzle processes

Conclusion

Wohoo! You've successfully used `ps` to find processes on Linux, and used `kill` to end them. These are common Linux commands, so we recommend you practice until you feel comfortable using them.

End your lab

When you have completed your lab, click **End Lab**. Qwiklabs removes the resources you've used and cleans the account for you.

You will be given an opportunity to rate the lab experience. Select the applicable number of stars, type a comment, and then click **Submit**.

The number of stars indicates the following:

- 1 star = Very dissatisfied
- 2 stars = Dissatisfied
- 3 stars = Neutral
- 4 stars = Satisfied
- 5 stars = Very satisfied

You can close the dialog box if you don't want to provide feedback.

For feedback, suggestions, or corrections, please use the **Support** tab.