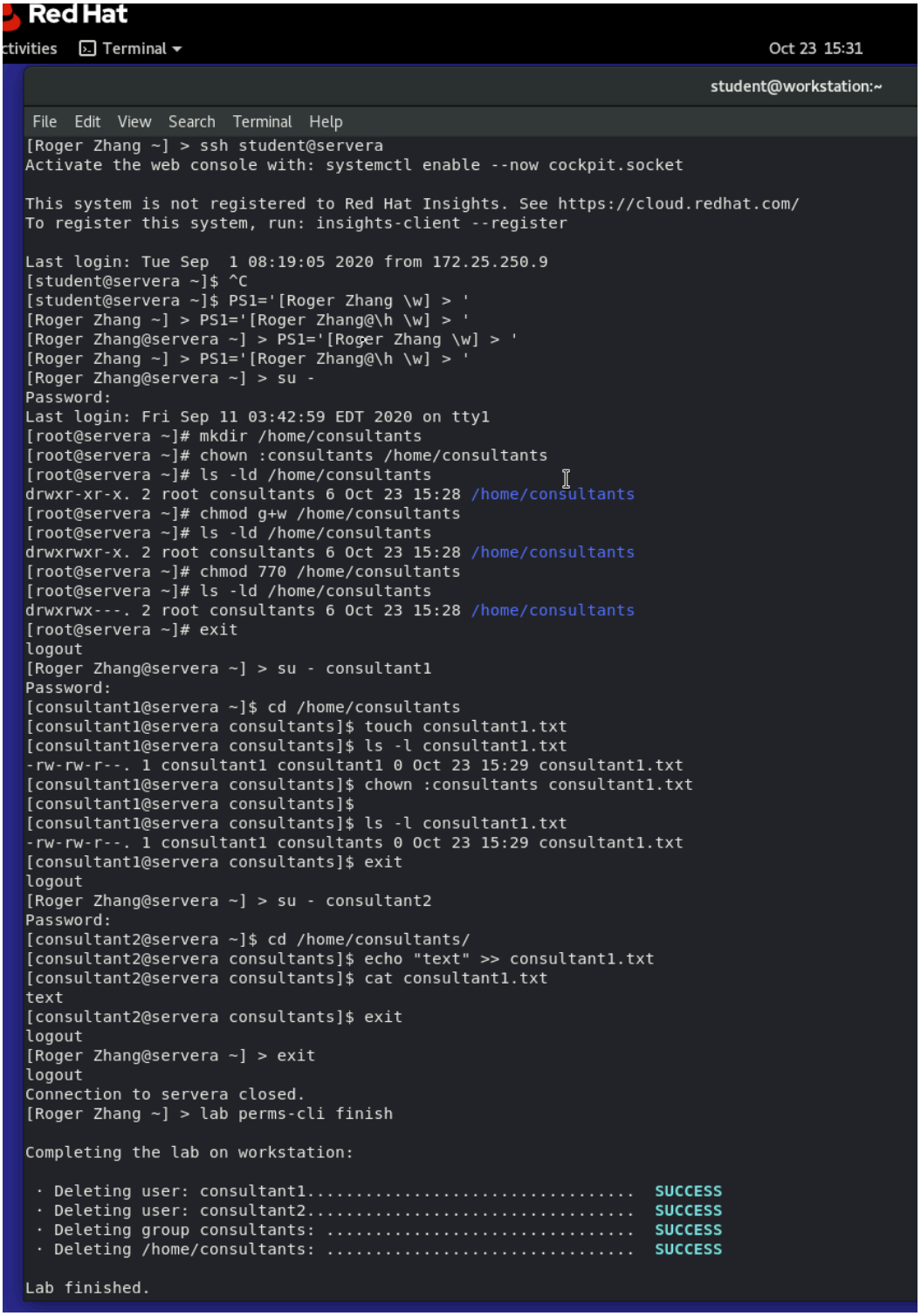
RH124 Report

Ruojia Zhang

Chapter 7

Figure 1

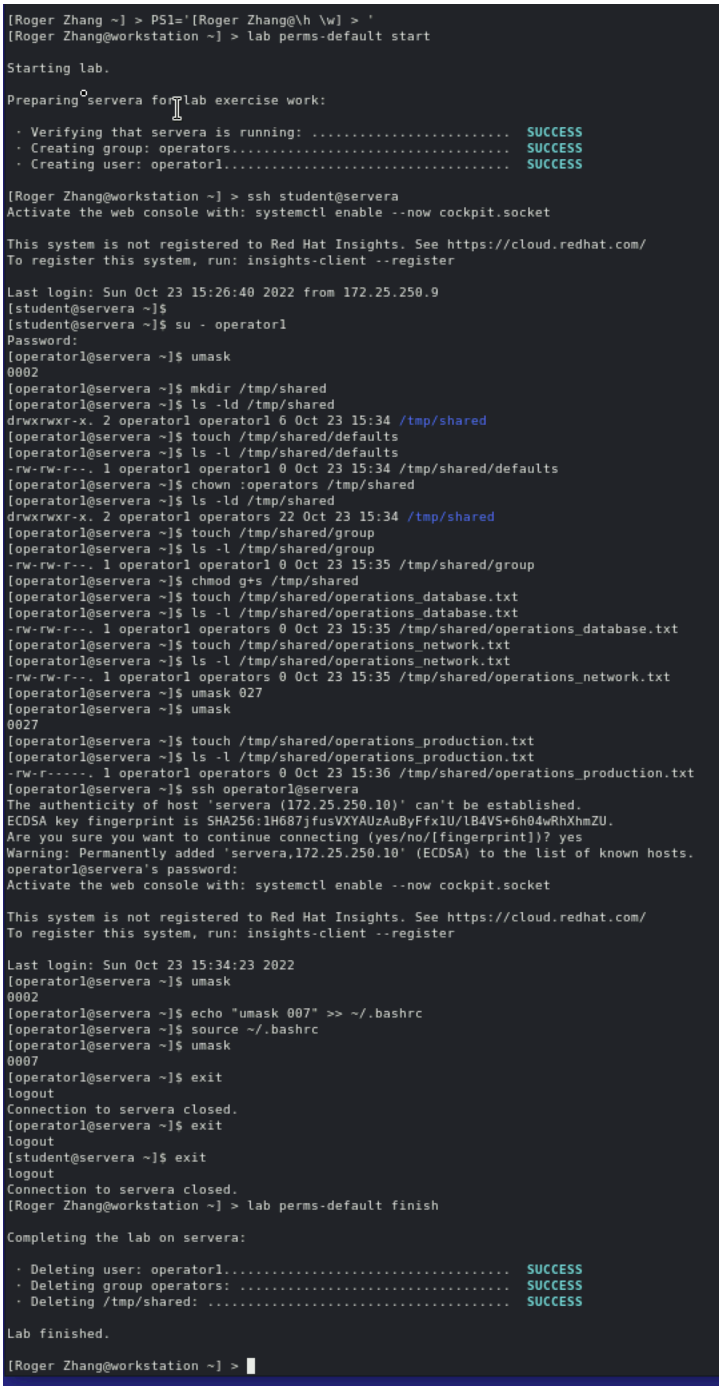
Execution of guided lab



Note: Run several file create, policy operation and finished the guided Exercise

Figure2

Guided exercise2



Note: Completed Guided exercise2 with umask and file creation

Figure3

Lab Execution

```
This system is not registered to Red Hat Insights. See https://cloud.redhat.com/
To register this system, run: insights-client --register

Last login: Tue Sep  1 08:19:05 2020 from 172.25.250.9
[student@serverb ~]$ su -
Password:
Last login: Fri Sep 11 03:42:59 EDT 2020 on tty1
[root@serverb ~]# mkdir /home/techdocs
[root@serverb ~]# chown :techdocs /home/techdocs
[root@serverb ~]# su - tech1
[tech1@serverb ~]$ touch /home/techdocs/test
touch: cannot touch '/home/techdocs/test': Permission denied
[tech1@serverb ~]$ logout
[root@serverb ~]# chmod 2770 /home/techdocs
[root@serverb ~]# su - tech1
Last login: Sun Oct 23 15:41:18 EDT 2022 on pts/0
[tech1@serverb ~]$ touch /home/techdocs/techdoc1.txt
[tech1@serverb ~]$ logout
[root@serverb ~]# su - tech2
[tech2@serverb ~]$ cd /home/techdocs
[tech2@serverb techdocs]$ echo "This is the first tech doc." > techdoc1.txt
[tech2@serverb techdocs]$ logout
[root@serverb ~]# su - database1
[database1@serverb ~]$ echo "This is the first tech doc." >> /home/techdocs/techdoc1.txt
-bash: /home/techdocs/techdoc1.txt: Permission denied
[database1@serverb ~]$ logout
[root@serverb ~]# su - student
Last login: Sun Oct 23 15:40:32 EDT 2022 from 172.25.250.9 on pts/0
[student@serverb ~]$ umask
0002
[student@serverb ~]$ logout
[root@serverb ~]# vim /etc/profile.d/local-umask.sh
[root@serverb ~]# logout
[student@serverb ~]$ logout
Connection to serverb closed.
[Roger Zhang@workstation ~] > ssh student@serverb
Activate the web console with: systemctl enable --now cockpit.socket

This system is not registered to Red Hat Insights. See https://cloud.redhat.com/
To register this system, run: insights-client --register

Last login: Sun Oct 23 15:42:57 2022
[student@serverb ~]$ umask
0007
[student@serverb ~]$ logout
Connection to serverb closed.
[Roger Zhang@workstation ~] > lab perms-review grade

Grading the lab:

 · Verifying permissions on /home/techdocs: ..................  PASS
 · Verifying directory: /home/techdocs.......................  PASS
 · Verifying that tech1 can edit /home/techdocs: ............  PASS
 · Verifying that database1 cannot edit /home/techdocs: .....  PASS
 · Verifying umask: .........................................  PASS

Overall lab grade...........................................  PASS

[Roger Zhang@workstation ~] > lab perms-review finish

Completing the lab on workstation:

 · Deleting tech1 user on serverb ...........................  SUCCESS
 · Deleting tech2 user on serverb ...........................  SUCCESS
 · Deleting database1 user on serverb .......................  SUCCESS
 · Deleting techdocs group on serverb .......................  SUCCESS
 · Deleting /home/techdocs: .................................  SUCCESS
 · Setting umask to default: ................................  SUCCESS

Lab finished.

[Roger Zhang@workstation ~] >
```

Note: Passed the lab of creating file and permission groups

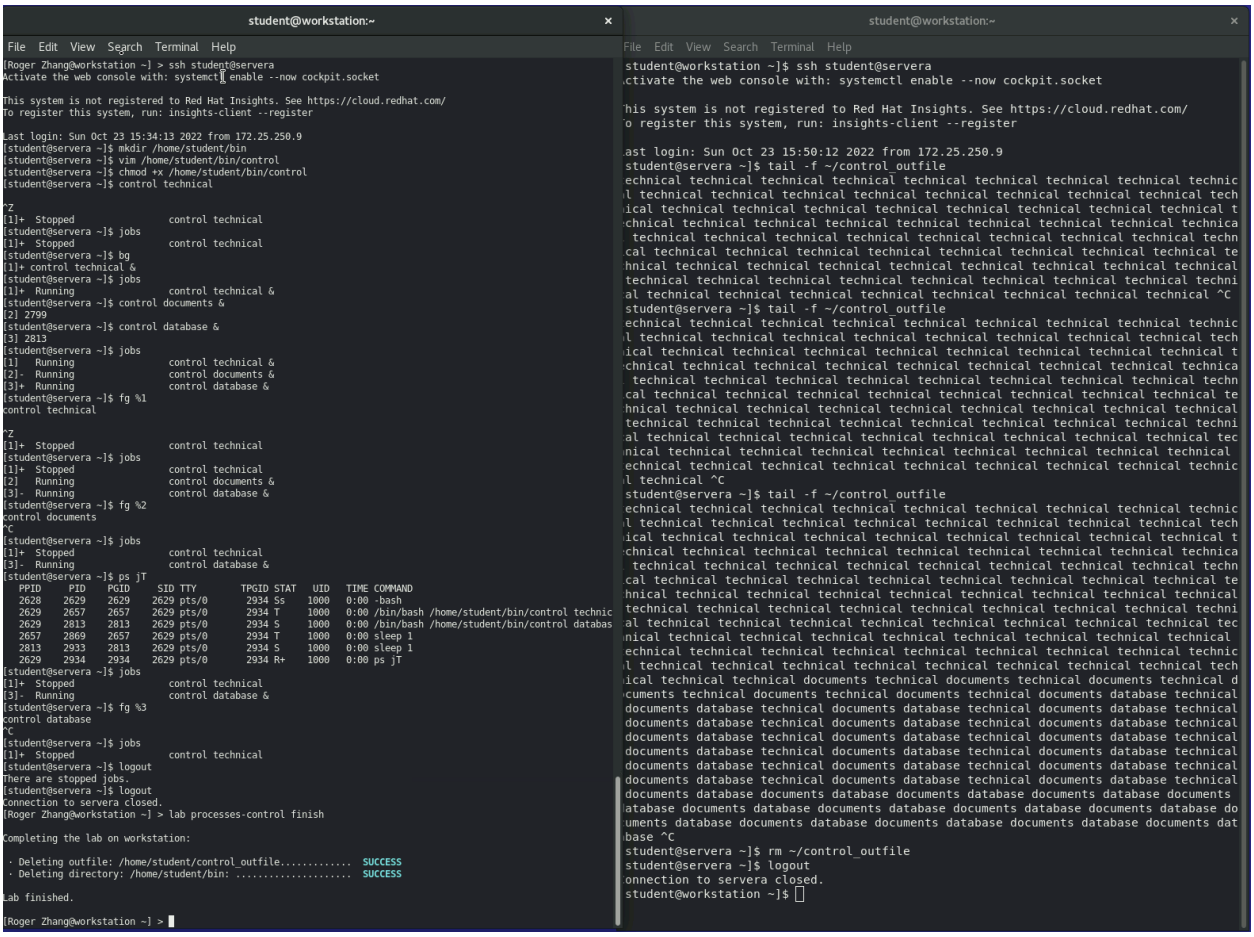
Chapter review

In this chapter, I've learnt to use ls -l to view permission, chown and chmod to change permission and use umask to modify overall permission mask. And the default umask values for Bash are defined in the /etc/profile and /etc/bashrc files.

Chapter 8

Figure 4

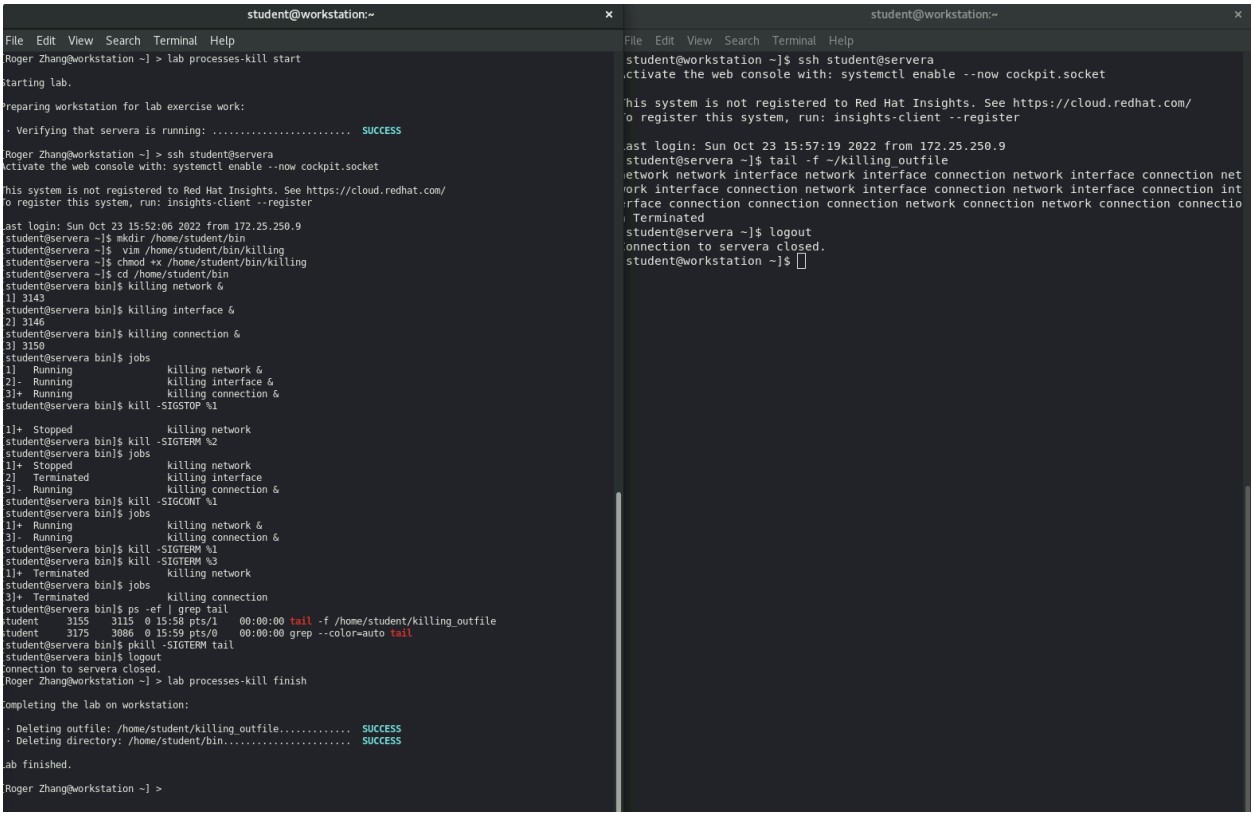
Excution of process control guided lab



Note: Uses fg, bg command to bring process to foreground or background and use ctrl+z/c to kill process

Figure 5

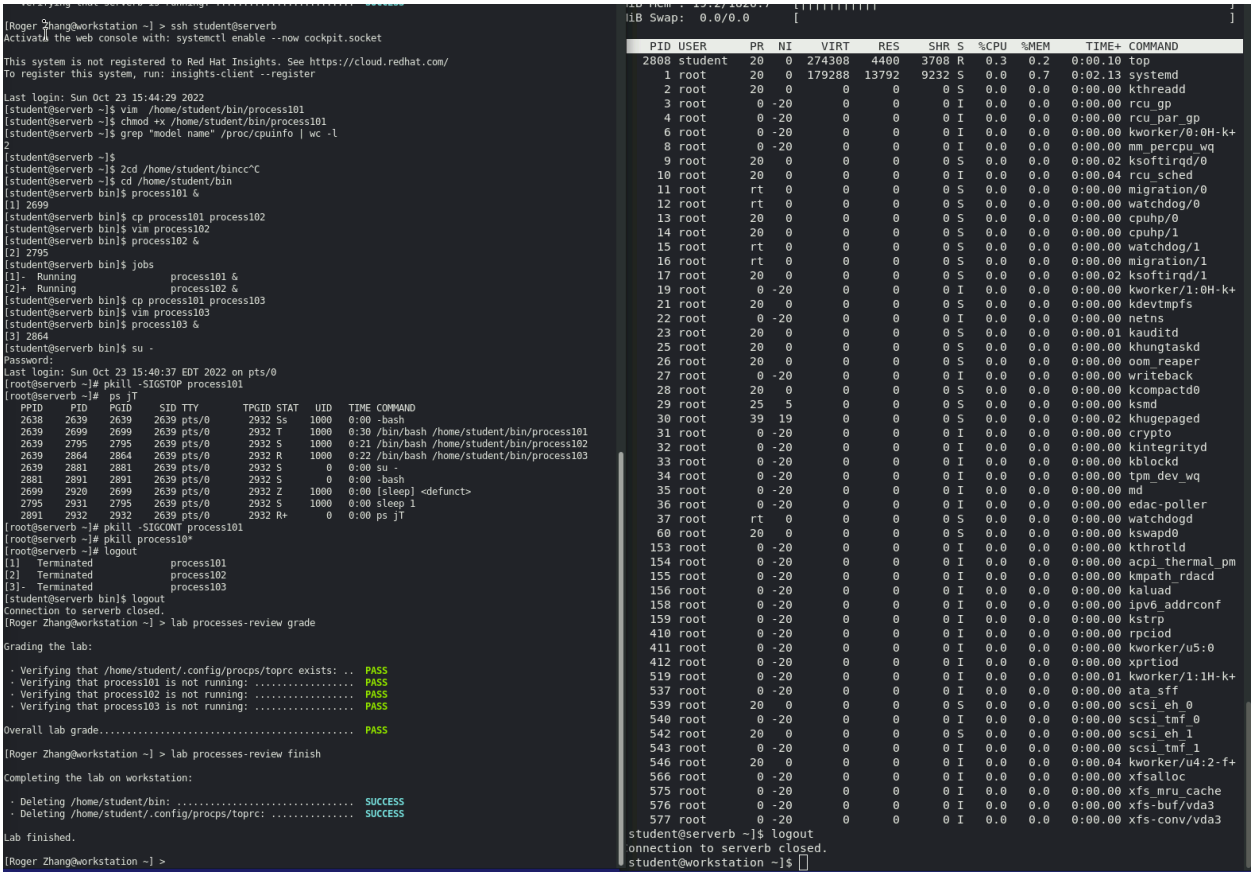
Excution of killing process



Note: Uses kill command to kill several processes.

Figure 6

Execution of LAB in chapter 8



Note: create 3 processes and run/terminate using the command we've learnt in this chapter

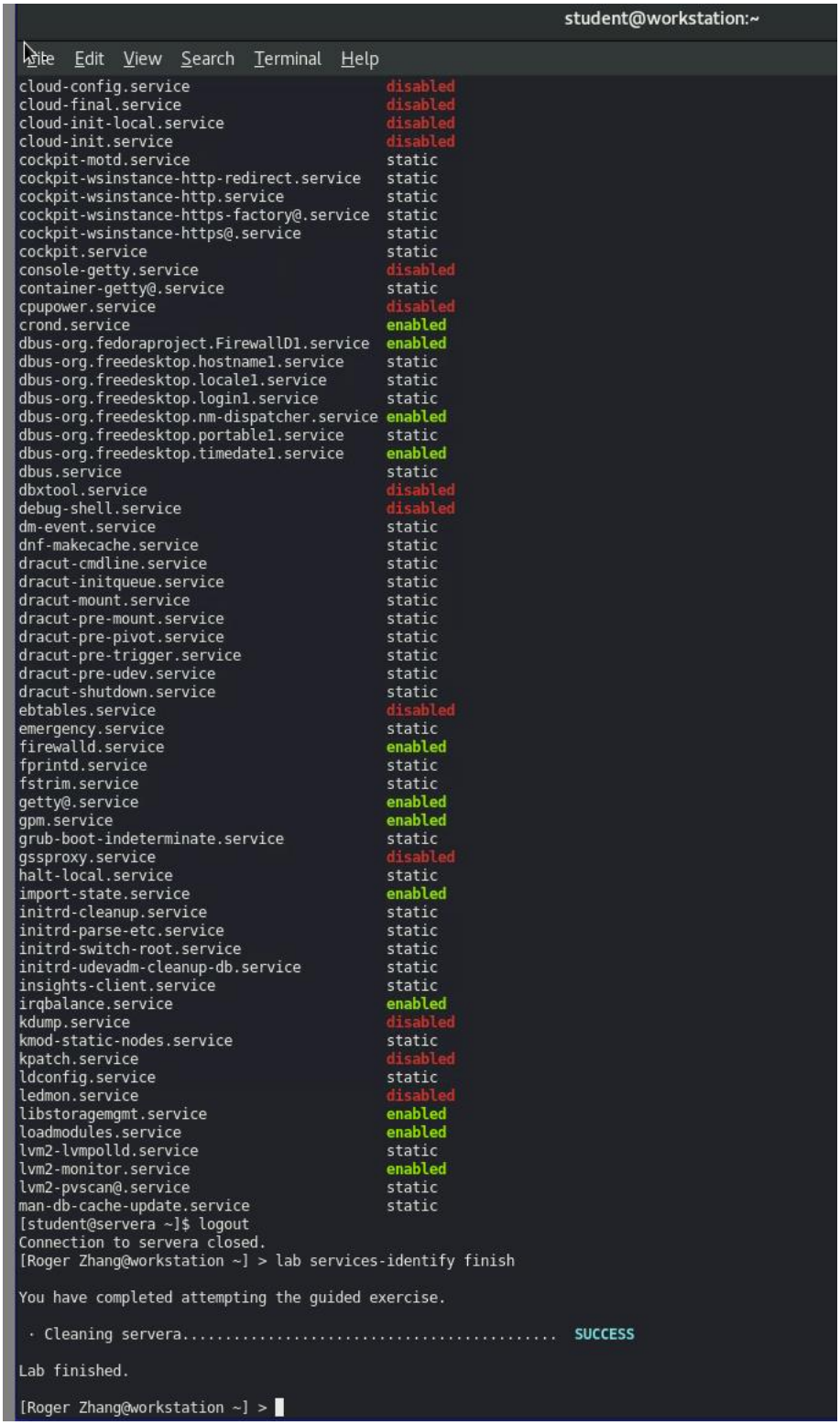
Chapter review

In this chapter,I learned: ps, jobs, pkill, kill ,top, uptime commands. And how to bring process to foreground/background. And also I've learnt how to estimate load average up on a system using the top command.

Chapter 9

Figure 7

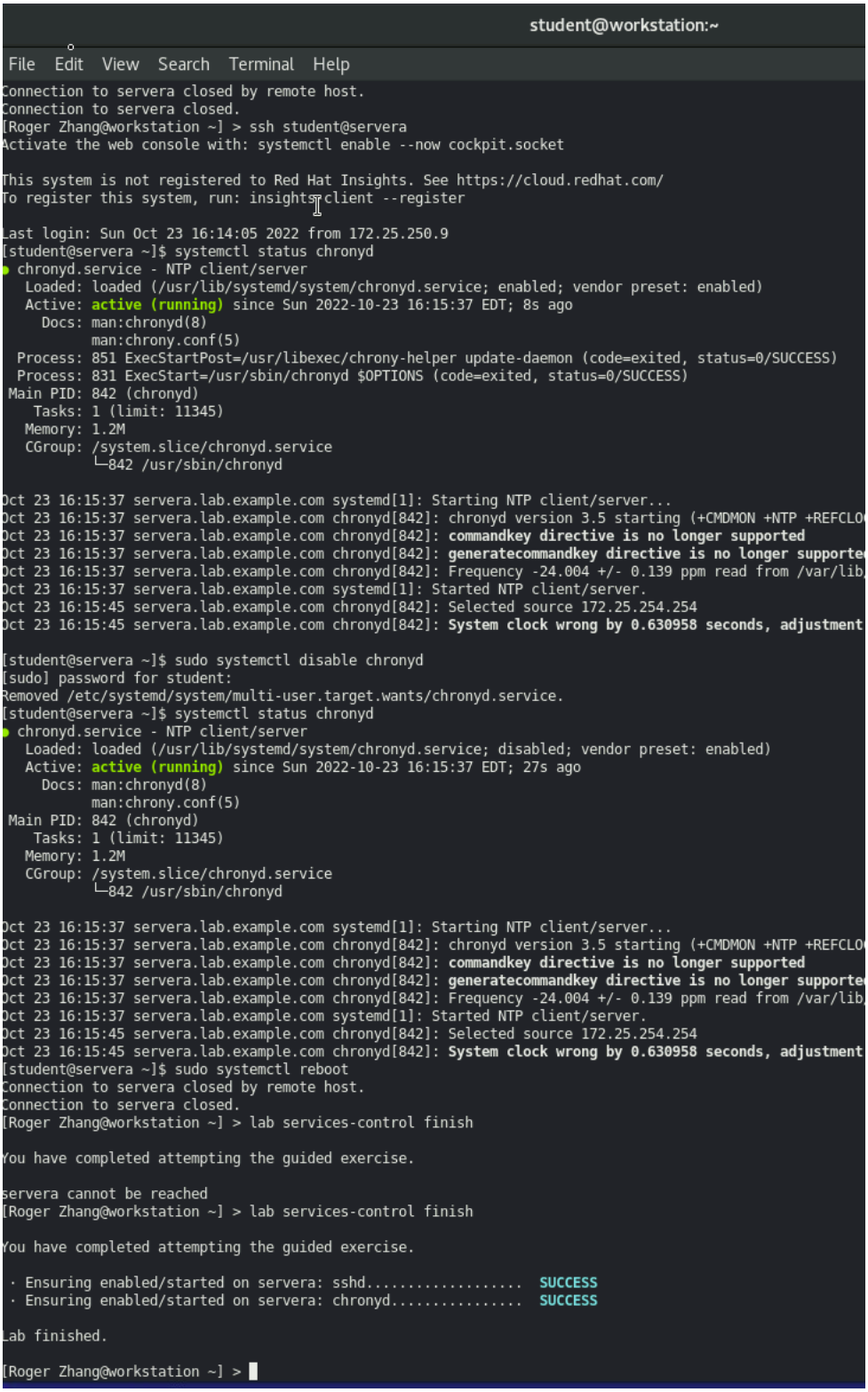
Completing the guilded exercise for systemctl



Note: Use systemctl command to view all the daemon status.

Figure 8

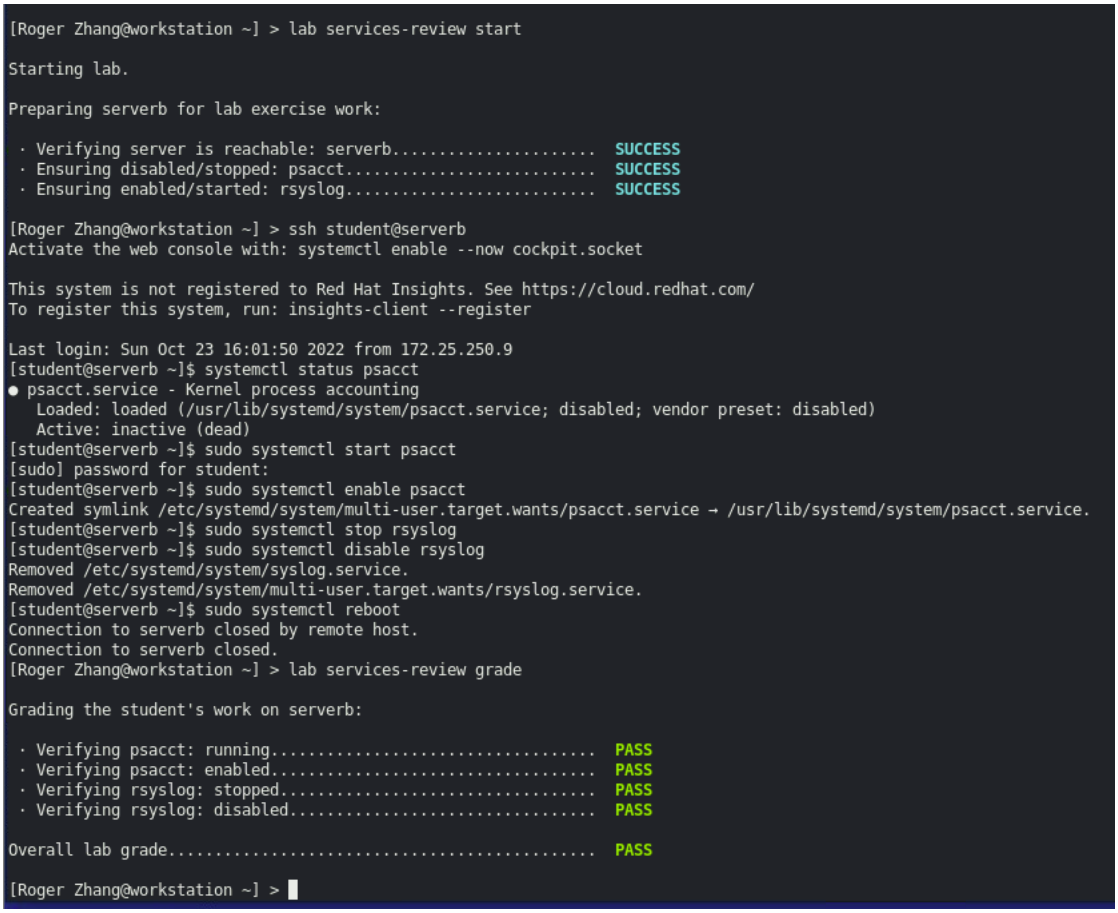
Systemctl disable/enable daemons



Note: Uses systemctl command to enable/disable several services

Figure 9

Execution of Lab for chapter 9



Note: Finishes using systemctl to disable and enable several services

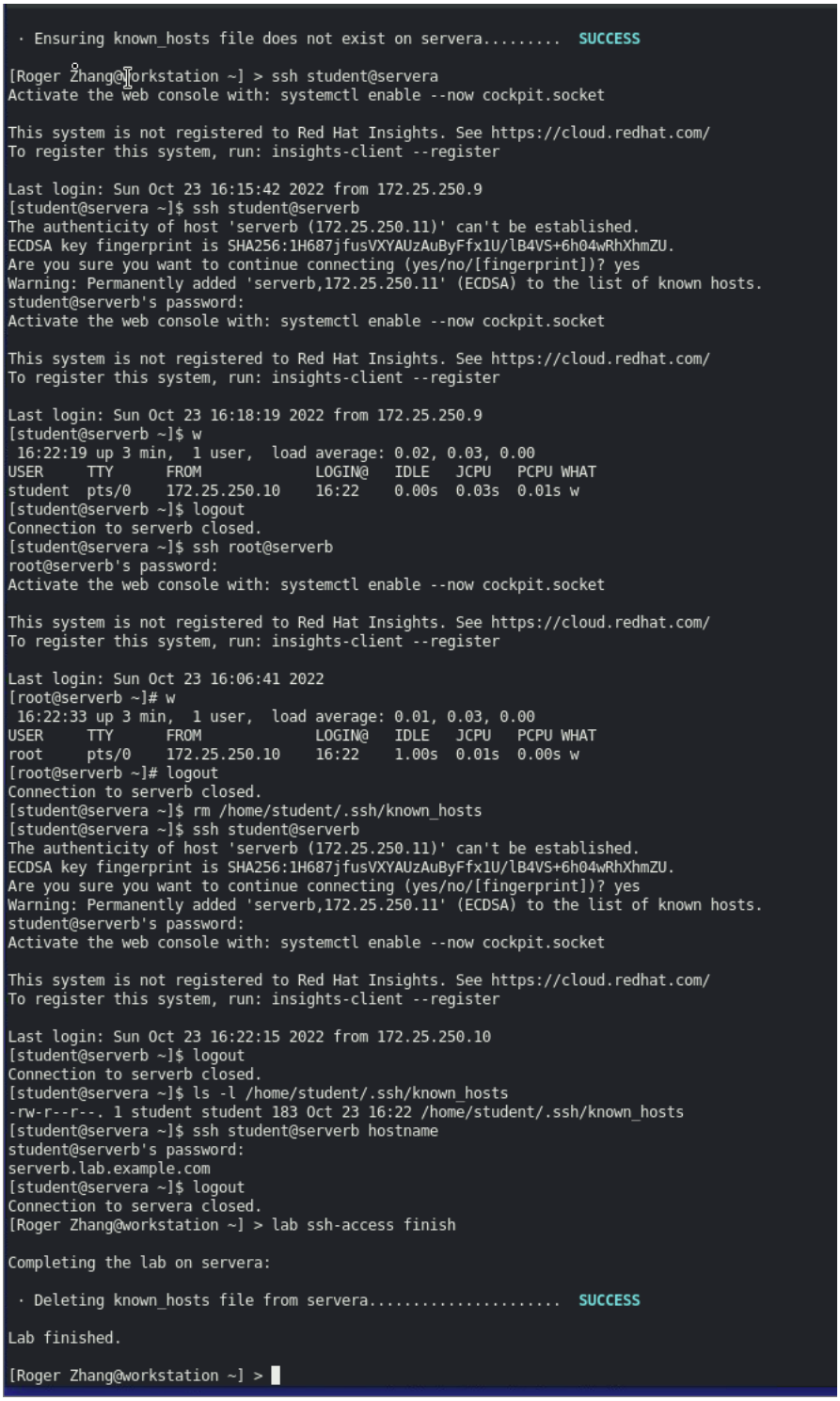
Chapter Review

In this chapter, I learned: systemd provides a method for activating system resources, server daemons, and other processes, both at boot time and on a running system. Use the systemctl to start, stop, reload, enable, and disable services. Use the systemctl status command to determine the status of system daemons and network services started by systemd. The systemctl list-dependencies command lists all service units upon which a specific service unit depends. systemd can mask a service unit so that it does not run even to satisfy dependencies.

Chapter 10

Figure 10

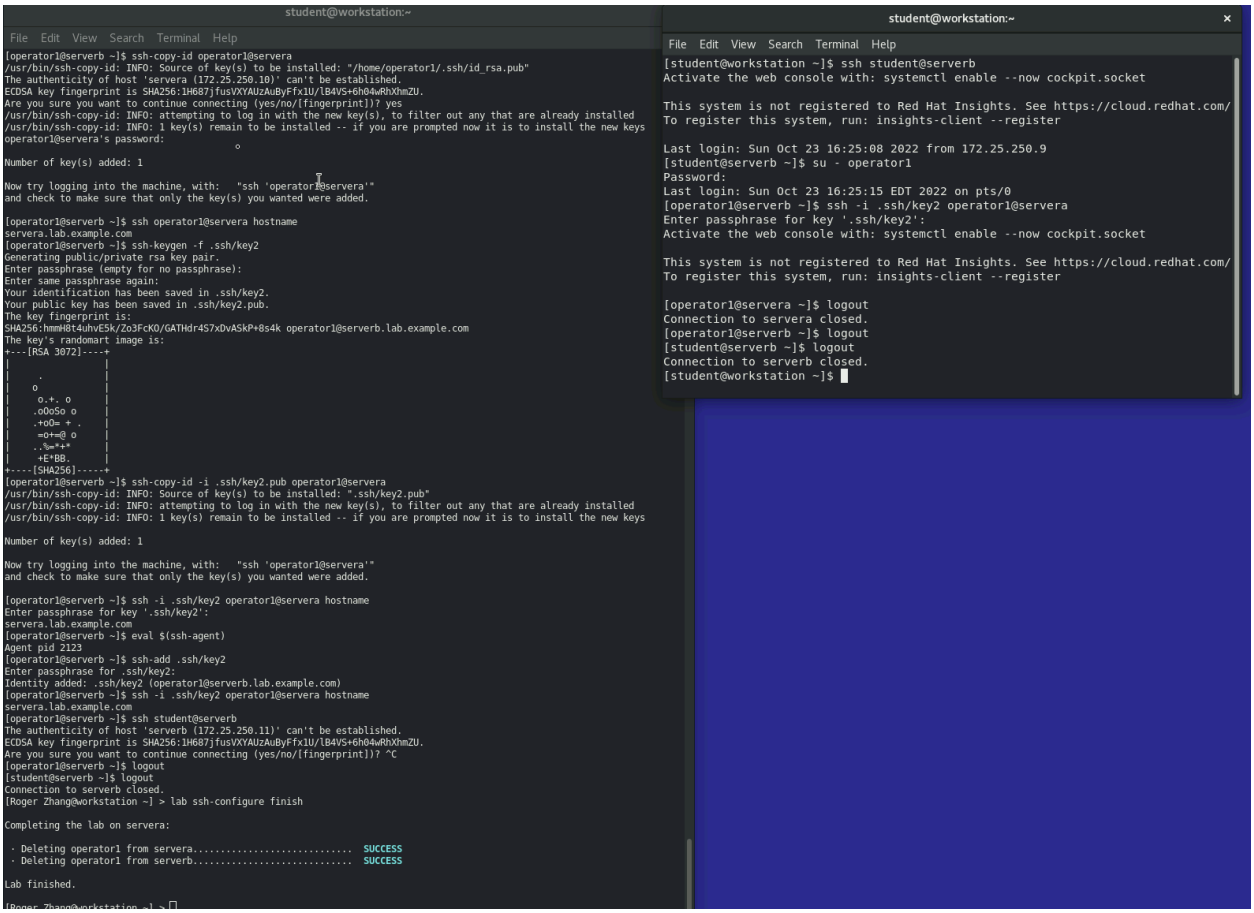
Guided exercise to Use ssh



Note: Use ssh to go to remote server and run command directly

Figure 11

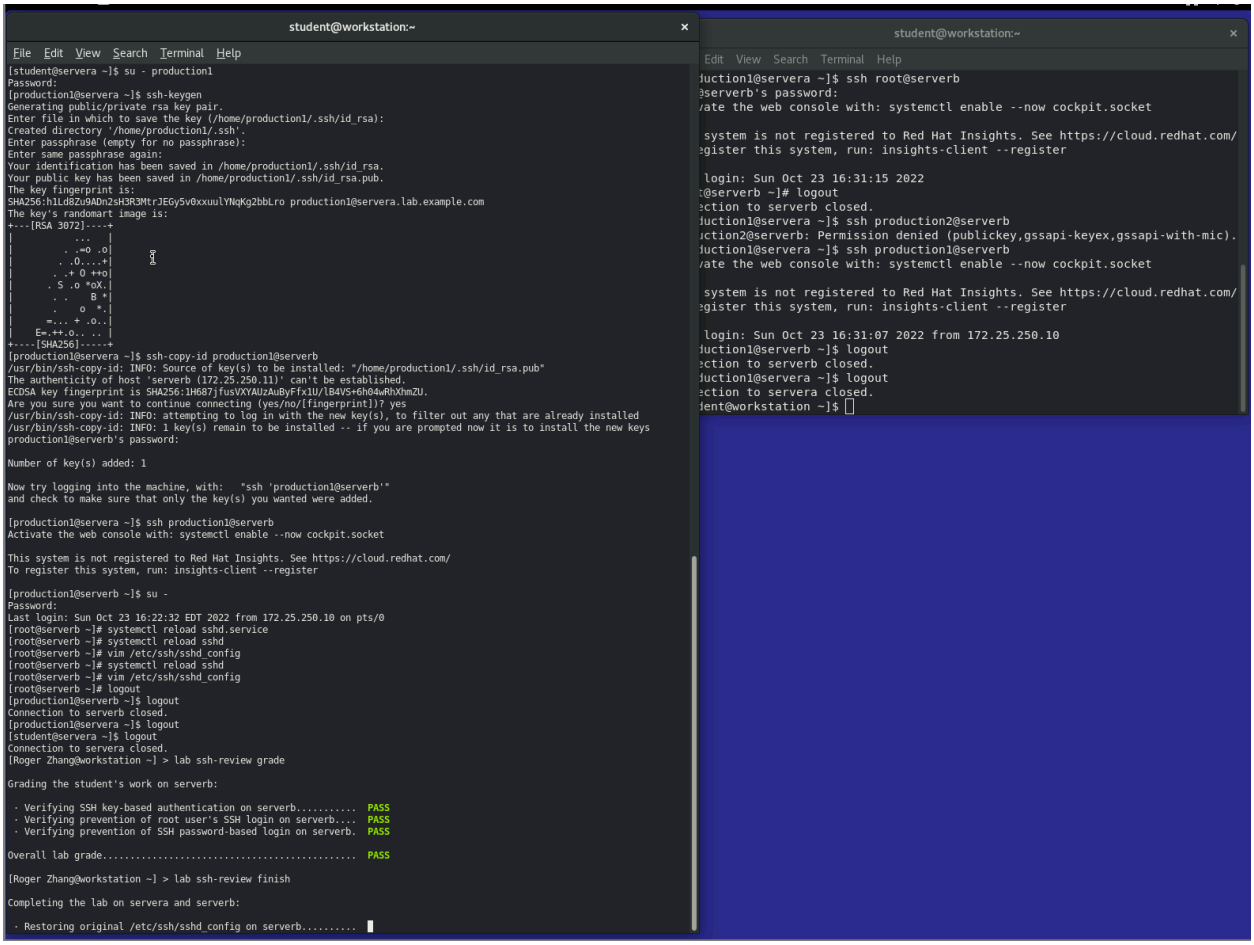
Finishes Exercise with guided exercise of using ssh key to run ssh command



Note: Generate ssh key and add them to identity for easier and safer ssh connections.

Figure 12

Finishes Lab for Chapter 10



Note: Uses ssh and keys and modify sshd config in this lab.

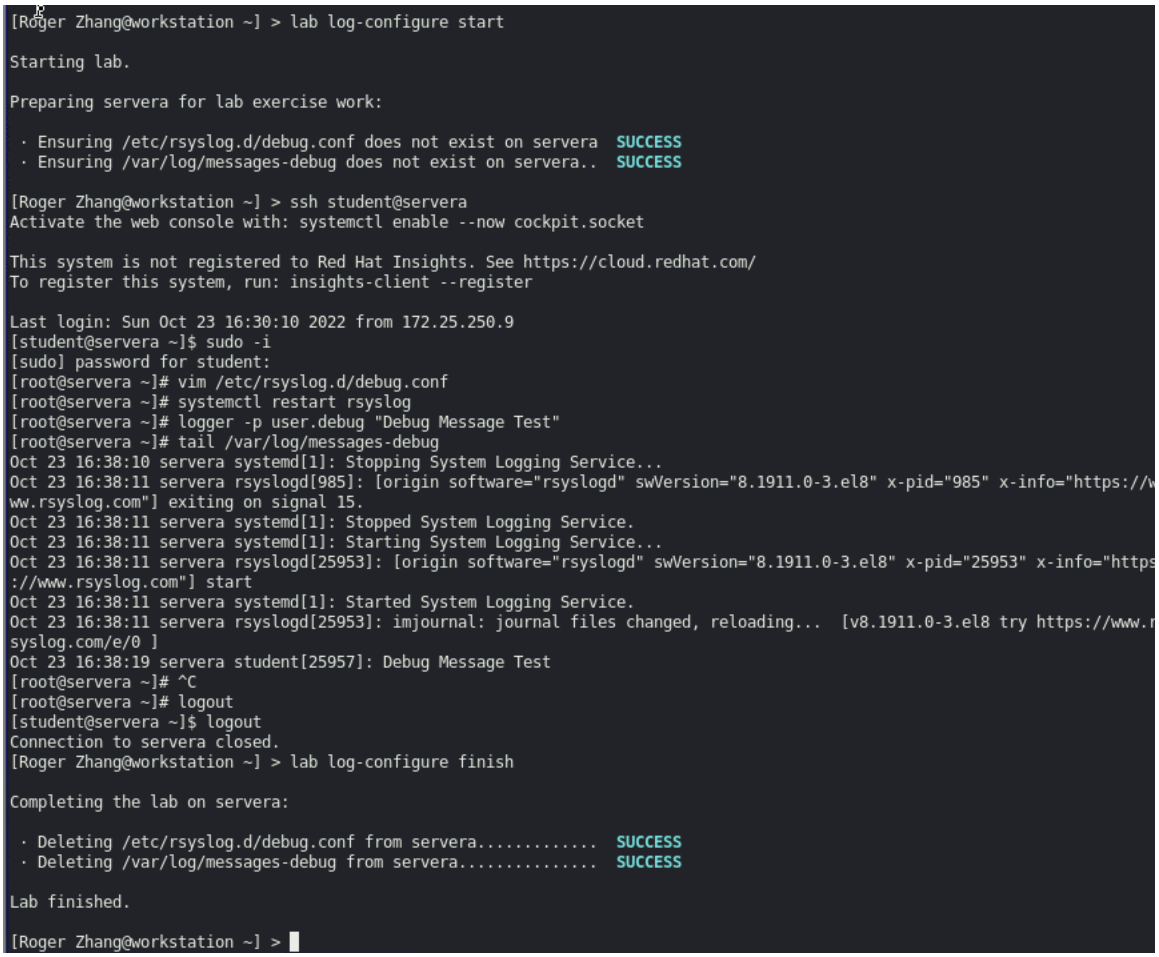
Chapter Review

In this chapter, I learned: The ssh command allows users to access remote systems securely using the SSH protocol. A client system stores remote servers' identities in ~/.ssh/known_hosts and /etc/ssh/ssh_known_hosts.

Chapter 11

Figure 13

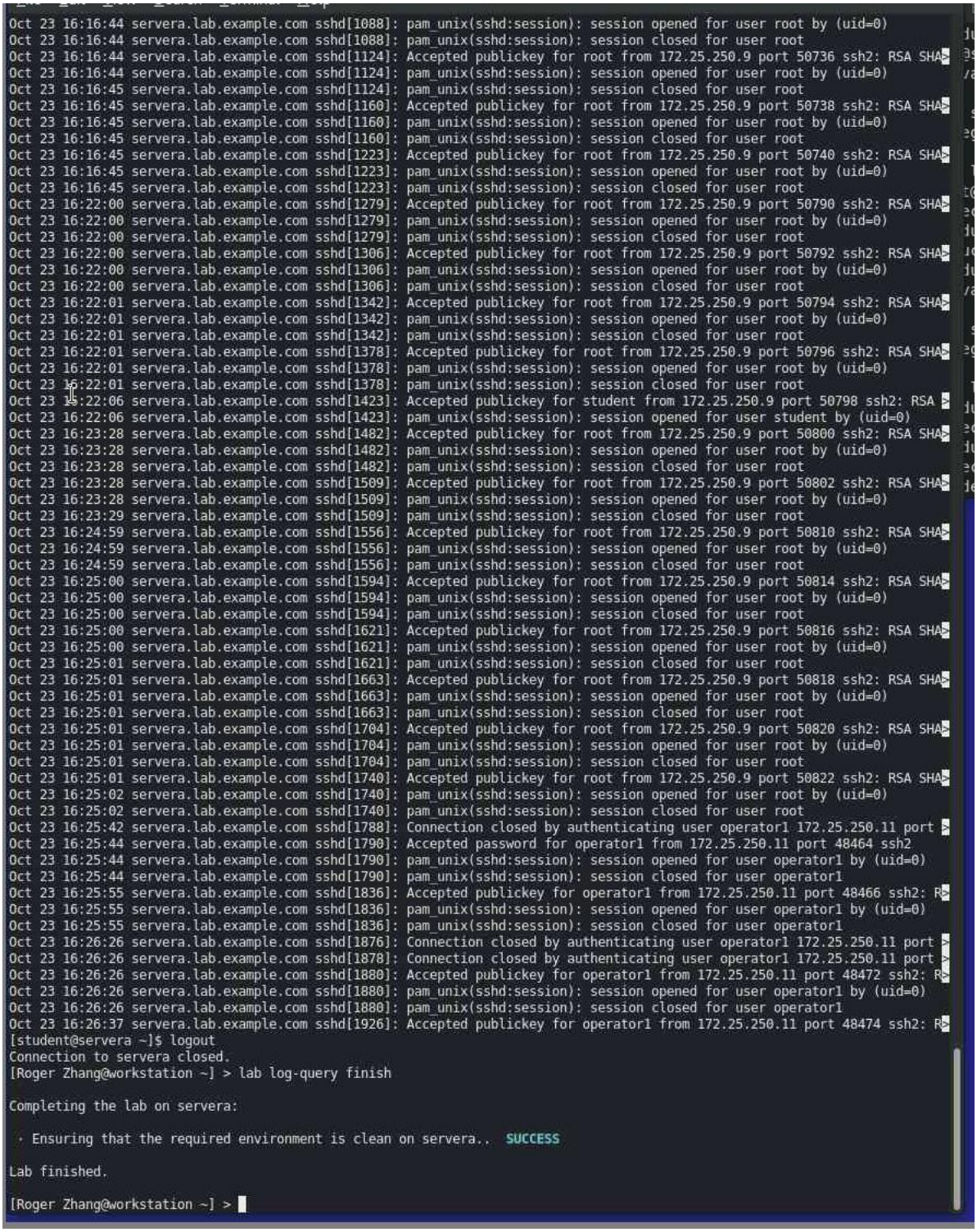
Using logger to send log message to system logs



Note: Uses logger, rsyslog to send log

Figure 14

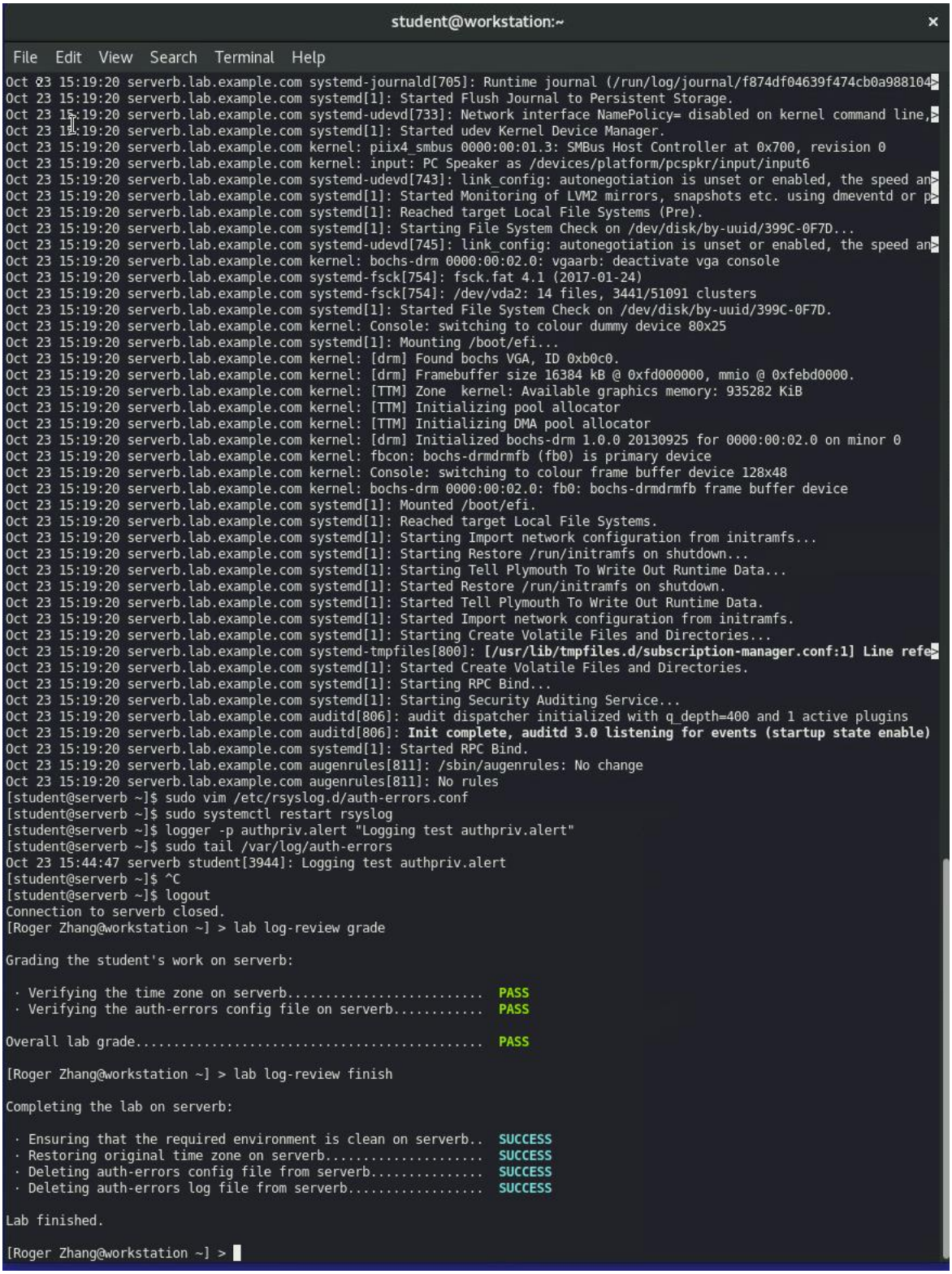
Finishes guided exercise log-query



Note: Uses jonurnalctl with several parameters to query all kind/level/time of logs.

Figure 15

Finishes Lab for log chapter



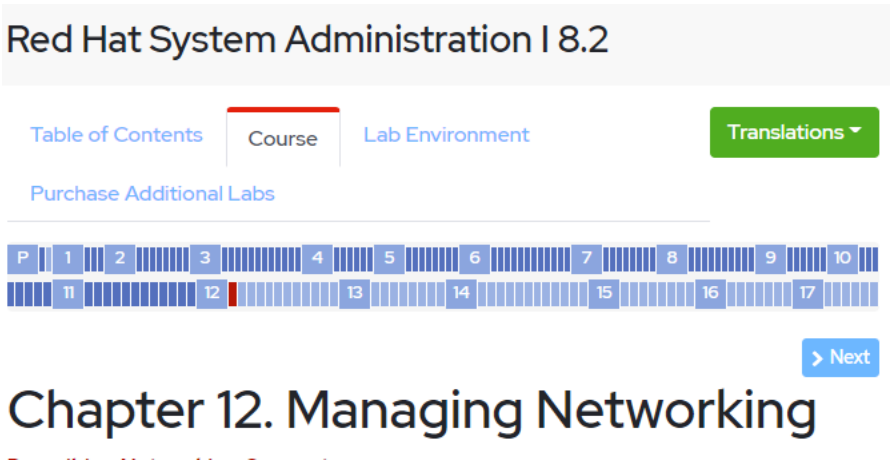
Note: Uses logger, change date etc to do server log maintenance

Chapter Review

In this chapter, I mainly leant how to deal with logs. The systemd-journald and rsyslog services capture and write log messages to the appropriate files. The /var/log directory contains log files. Periodic rotation of log files prevent them from filling up the file system space. The systemd journals are temporary and do not persist across reboot. The chronyd service helps to synchronize time settings with a time source. The time zone of the server can be updated based on its location.

Figure 16

Screen shot of current progress



Note: currently finished everything before chapter 12.