Chapter 15.7 Lab: Accessing Linux File Systems

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ITEC 200: Linux Fundamentals

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**Red Hat System Administration I 8.2**

**Lab 11 CH 15.7 Lab: Accessing Linux File Systems**

# ****Performance Checklist****

**In this lab, you will set up key-based authentication for users, and disable direct login as root and password authentication for all users for the OpenSSH service on one of your servers.**

# ****Outcomes****

**You should be able to:**

* **Authenticate using SSH keys.**
* **Prevent users from directly logging in as root over ssh.**
* **Prevent users from logging in to the system using SSH password-based authentication.**

# ****Log in to workstation as student using student as the password.****

|  |  |  |  |
| --- | --- | --- | --- |
|  | Franklin VM: | Standard User Account: | The Student's Root Account: |
| Username | kiosk | student | root |
| Password | redhat | student | redhat |

<https://franklin.instructure.com/courses/12488/modules/items/683350>

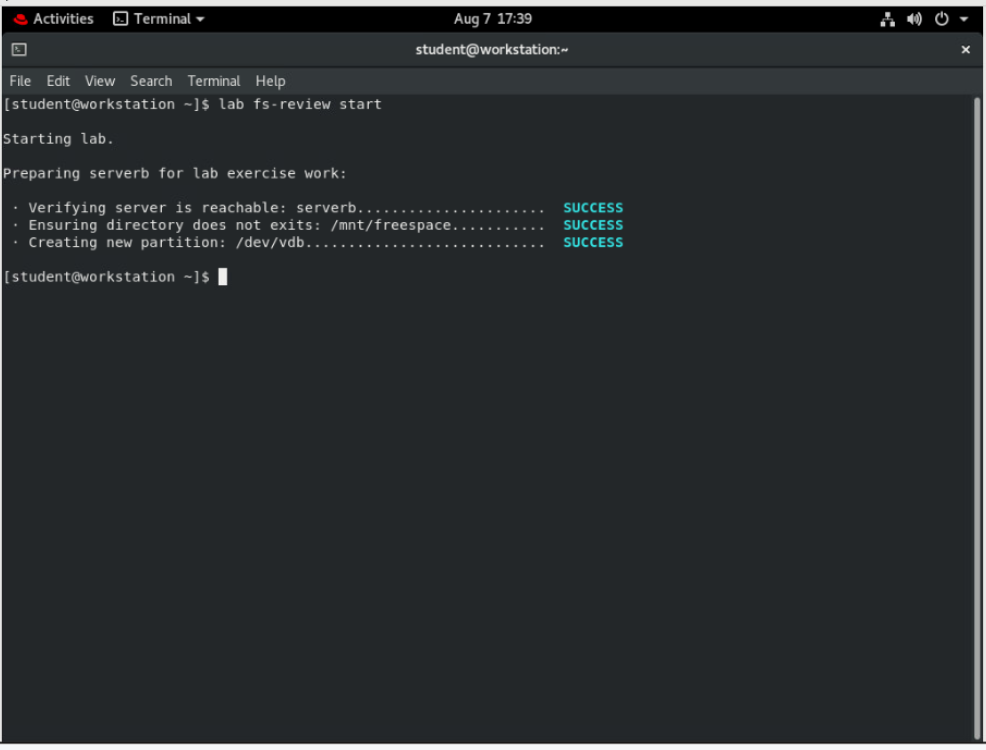
[kiosk@foundation0 ~]$ rht-vmctl start all

[kiosk@foundation0 ~]$ rht-vmview view workstation

# ****Start Lab****

From workstation, run the **lab fs-review start** command. The command runs a start script that determines if the host, serverb, is reachable on the network. The script also creates a partition on the second disk attached to serverb.

**[student@workstation ~]$ lab fs-review start**



1. On serverb as root, identify the UUID for /dev/vdb1 and mount /dev/vdb1 by its UUID on the /mnt/freespace directory.
   1. Use the **ssh** command to log in to serverb as the student user.

**[student@workstation ~]$ ssh student@serverb**

*...output omitted...*

**[student@serverb ~]$**

* 1. Use the su - command to switch to root.

**[student@serverb ~]$ su -**

Password: **redhat**

**[root@serverb ~]#**

* 1. Use the lsblk command to determine the UUID of the /dev/vdb1 device.

**[root@serverb ~]# lsblk -fp /dev/vdb**

NAME FSTYPE LABEL UUID MOUNTPOINT

/dev/vdb

└─/dev/vdb1 xfs a04c511a-b805-4ec2-981f-42d190fc9a65

* 1. Create the /mnt/freespace directory.

**[root@serverb ~]# mkdir /mnt/freespace**

* 1. Mount the /dev/vdb1 device by using the UUID on the /mnt/freespace directory.

**[root@serverb ~]# mount UUID="*a04c511a-b805-4ec2-981f-42d190fc9a65*" /mnt/freespace**

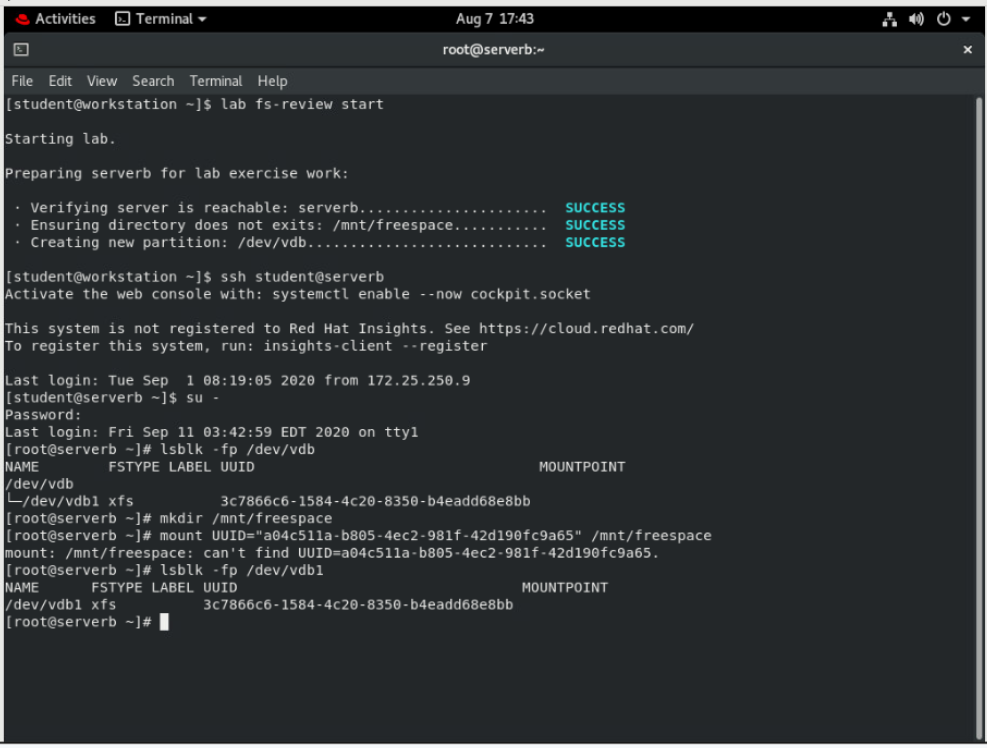
* 1. Verify that the /dev/vdb1 device is mounted on the /mnt/freespace directory.

**[root@serverb ~]# lsblk -fp /dev/vdb1**

NAME FSTYPE LABEL UUID MOUNTPOINT

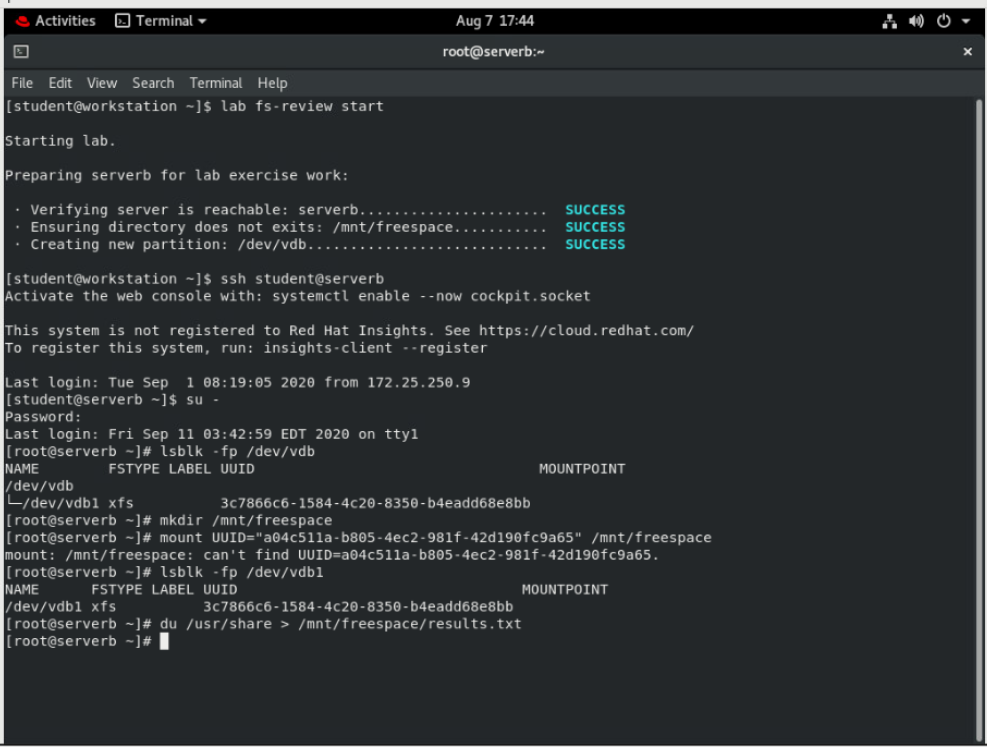
/dev/vdb

└─/dev/vdb1 xfs a04c511a-b805-4ec2-981f-42d190fc9a65 /mnt/freespace



1. Generate a disk usage report of the /usr/share directory, and save the result in the /mnt/freespace/results.txt file.

**[root@serverb ~]# du /usr/share > /mnt/freespace/results.txt**

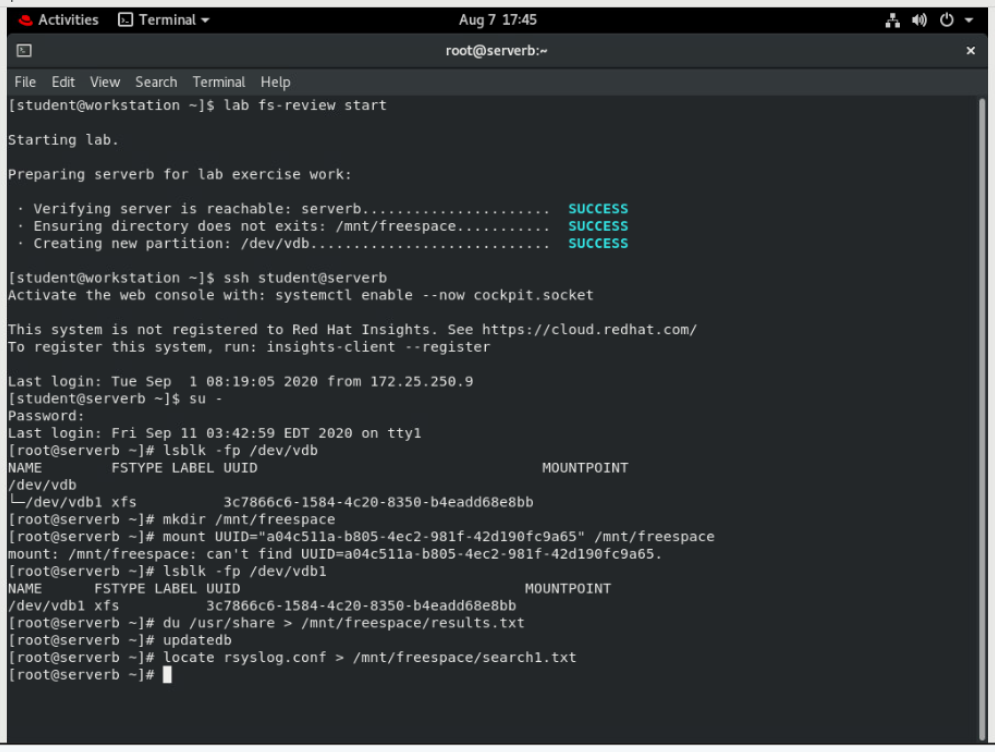


1. Use the locate command to find all rsyslog.conf configuration files and store the result in the /mnt/freespace/search1.txt file.
   1. Use the updatedb command to update the database used by locate.

**[root@serverb ~]# updatedb**

* 1. Locate rsyslog.conf configuration files and save the result in the /mnt/freespace/search1.txt file.

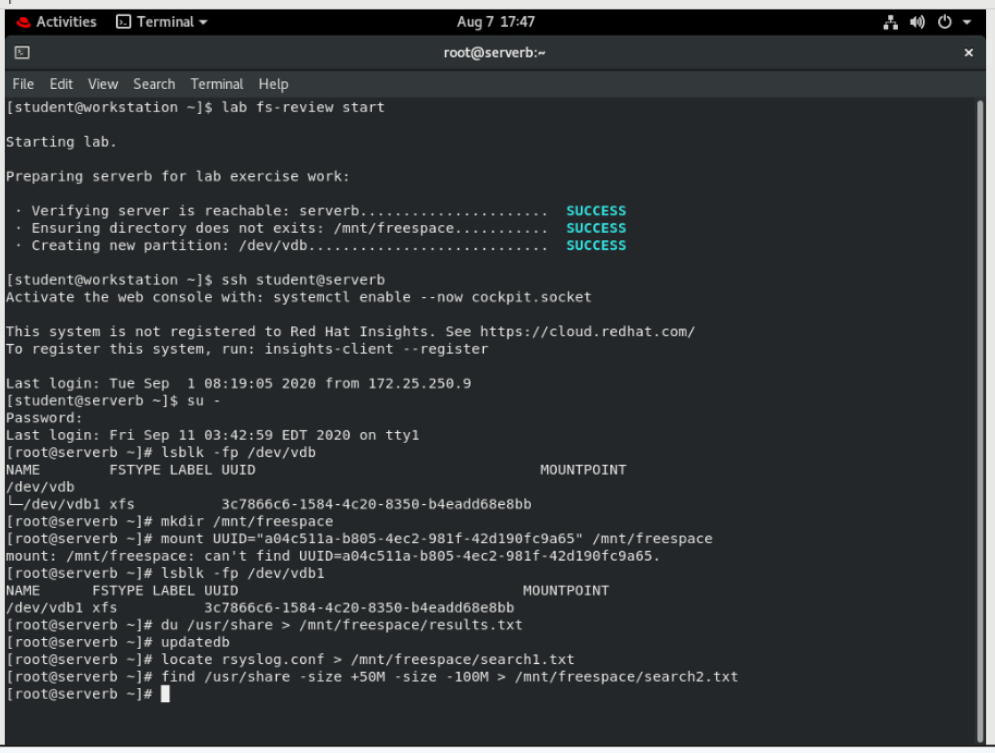
**[root@serverb ~]# locate rsyslog.conf > /mnt/freespace/search1.txt**



1. Store the search result of all files in the /usr/share directory that is greater than 50 MB and less than 100 MB in the /mnt/freespace/search2.txt file.

**[root@serverb ~]# find /usr/share -size +50M -size -100M > \**

**/mnt/freespace/search2.txt**



1. Exit from serverb.

**[root@serverb ~]$ exit**

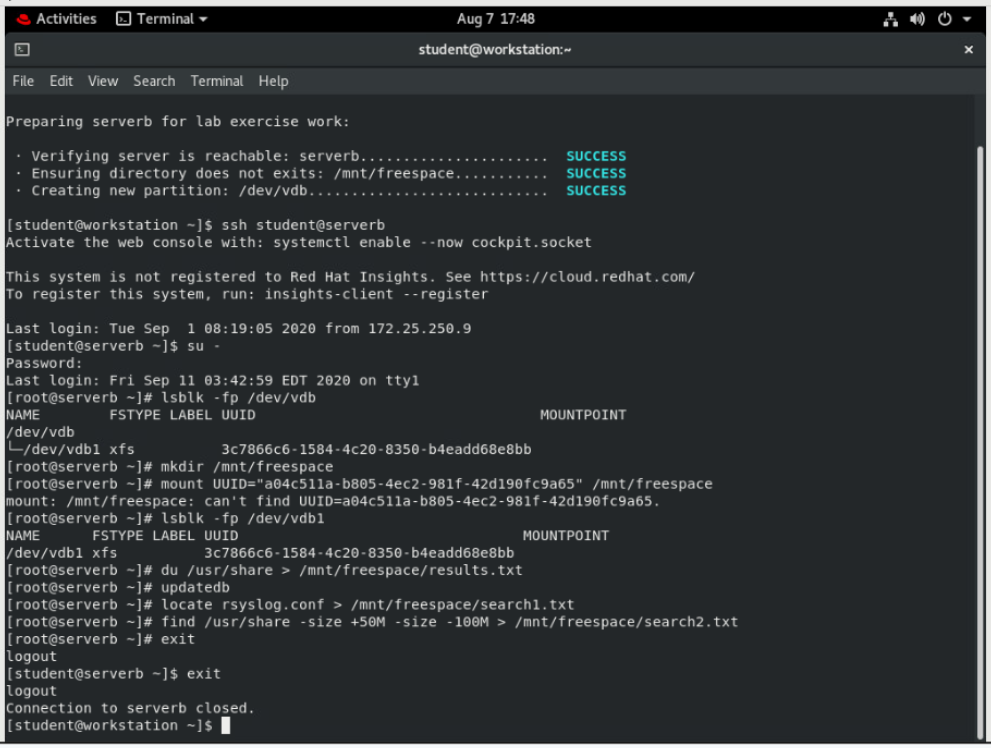
logout

**[student@serverb ~]$ exit**

logout

Connection to serverb closed.

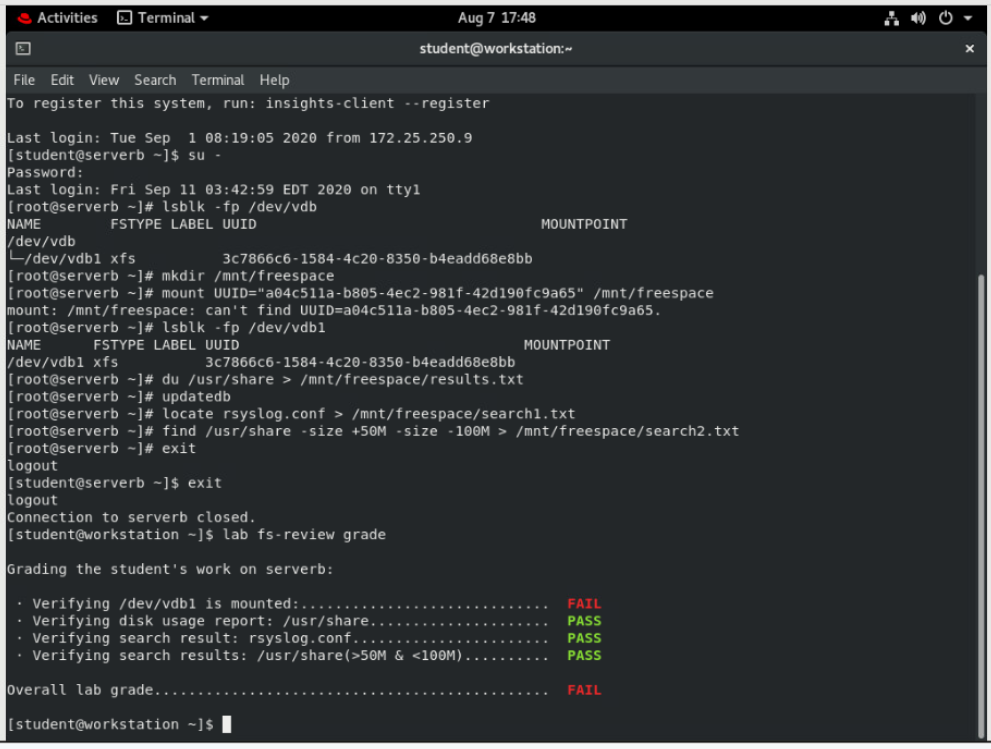
**[student@workstation]$**

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# Evaluation

On workstation, run the **lab fs-review grade** script to confirm success on this lab.

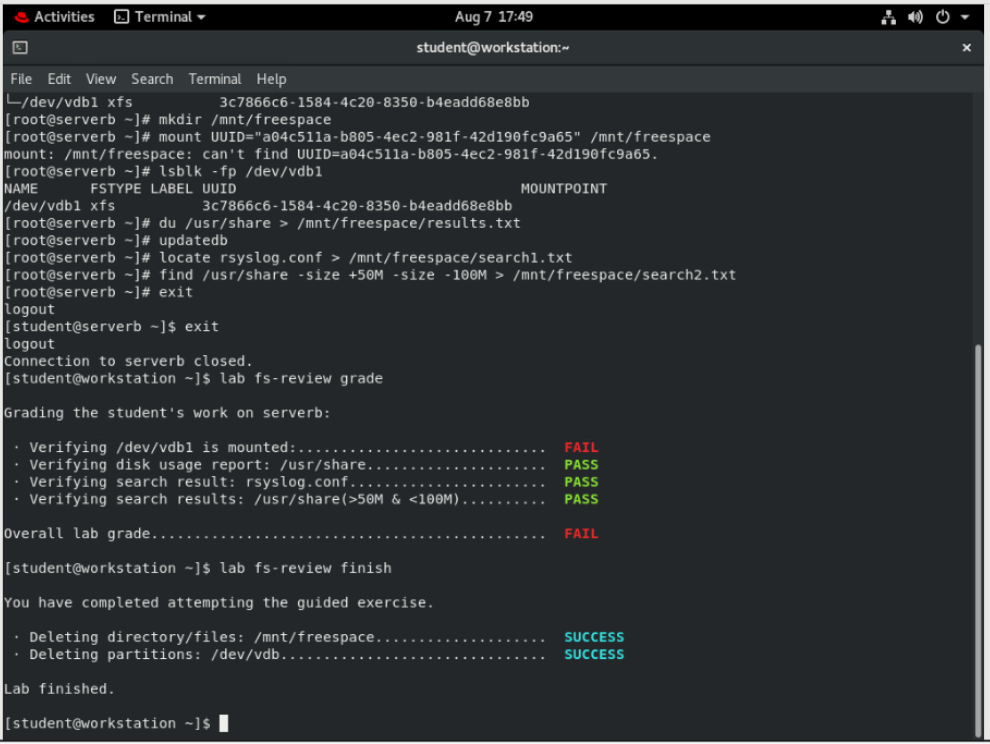
**[student@workstation ~]$ lab fs-review grade**



# Finish

On workstation, run the **lab fs-review finish** script to complete this exercise.

**[student@workstation ~]$ lab fs-review finish**



This concludes the lab.