CompTIA Linux+

View the Hard Drive Details

Introduction

Welcome to the View the Hard Drive Details Practice Lab. In this module you will be provided with the instructions and devices needed to develop your hands-on skills.

Hard Drive
Linux System
Filesystems

Learning Outcomes

In this module, you will complete the following exercise:

- Exercise 1 - View the Hard Drive Details

After completing this lab, you will be able to:

- Use various methods to view hard drive details.

Exam Objectives

The following exam objectives are covered in this lab:

- LPI: 104.1 Create partitions and filesystems.

- LPI: 104.3 Control mounting and unmounting of filesystems.
- CompTIA: 1.4 Given a scenario, manage storage in a Linux environment.

During your session, you will have access to the following lab configura

Exercise 1 - View the Hard Drive Details

CentOS provides various methods and commands to view the hard drive details.

In this exercise, you will learn to view the hard drive details.

Learning Outcomes

After completing this exercise, you will be able to:

- Log into a Linux system
- Use various methods to view hard drive detai

Task 1 -Use Various Methods to View Hard Drive Details

There are various methods that you can use to view the hard drive details.

In this task, you will learn to view the hard drive details. To view the hard drive details, perform the following steps:

Step 1

On the desktop, right-click and select Open Terminal.

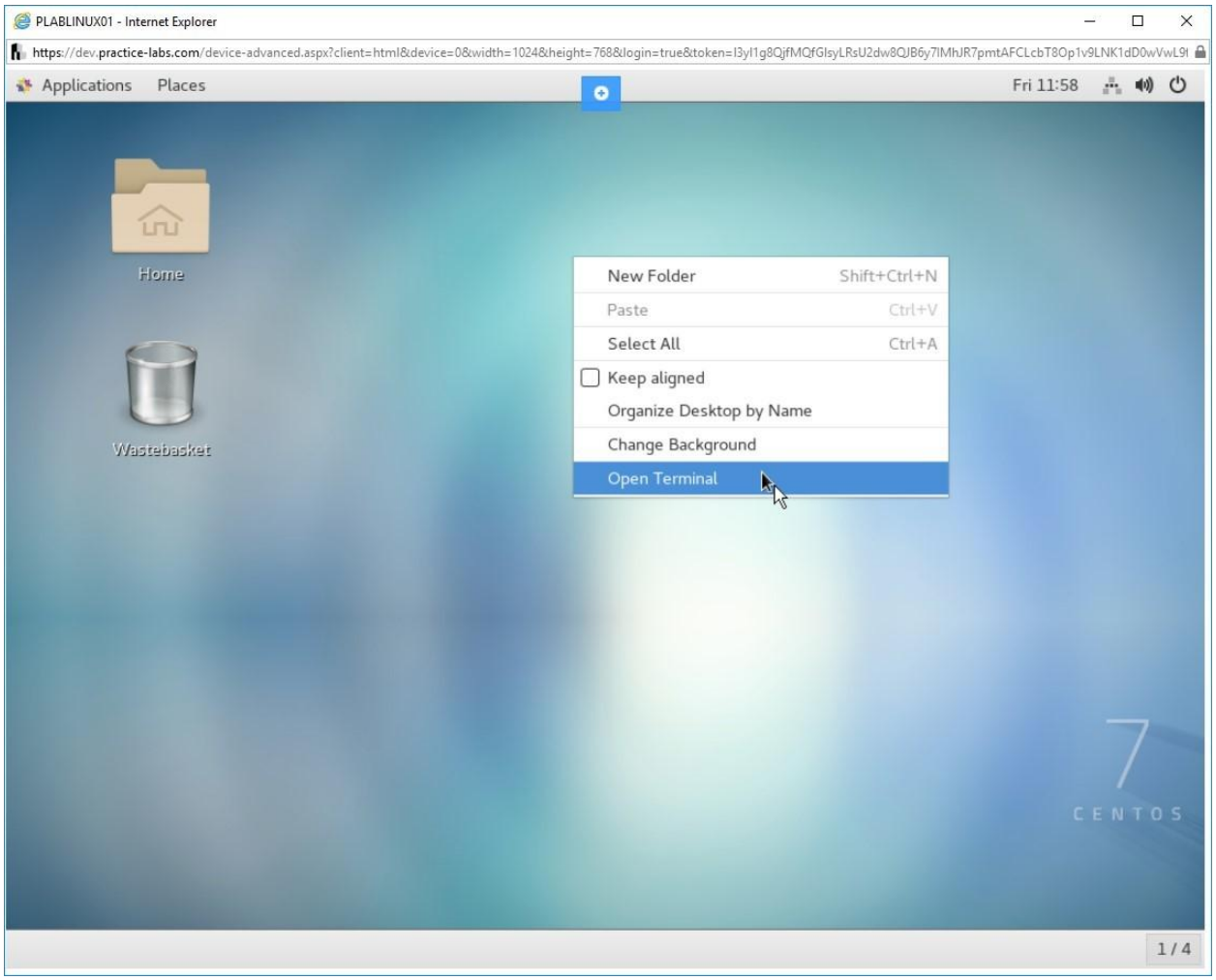

Figure 1.1 Screenshot of PLABLINUX01: Selecting the Open Terminal option from the context menu.

Step 2

The terminal window is displayed. You can use view the /proc/partitions file to view the hard drive details. This file contains a table that mentions the major and minor number of partitioned devices. Type the following command:

```
cat /proc/partitions
```

Press Enter. Notice that there are major and minor columns. The major column defines the device type. For example, the number 2 denotes a floppy drive. The number 8 denotes sd device. The minor column defines the unique identification of an instance of this device type.

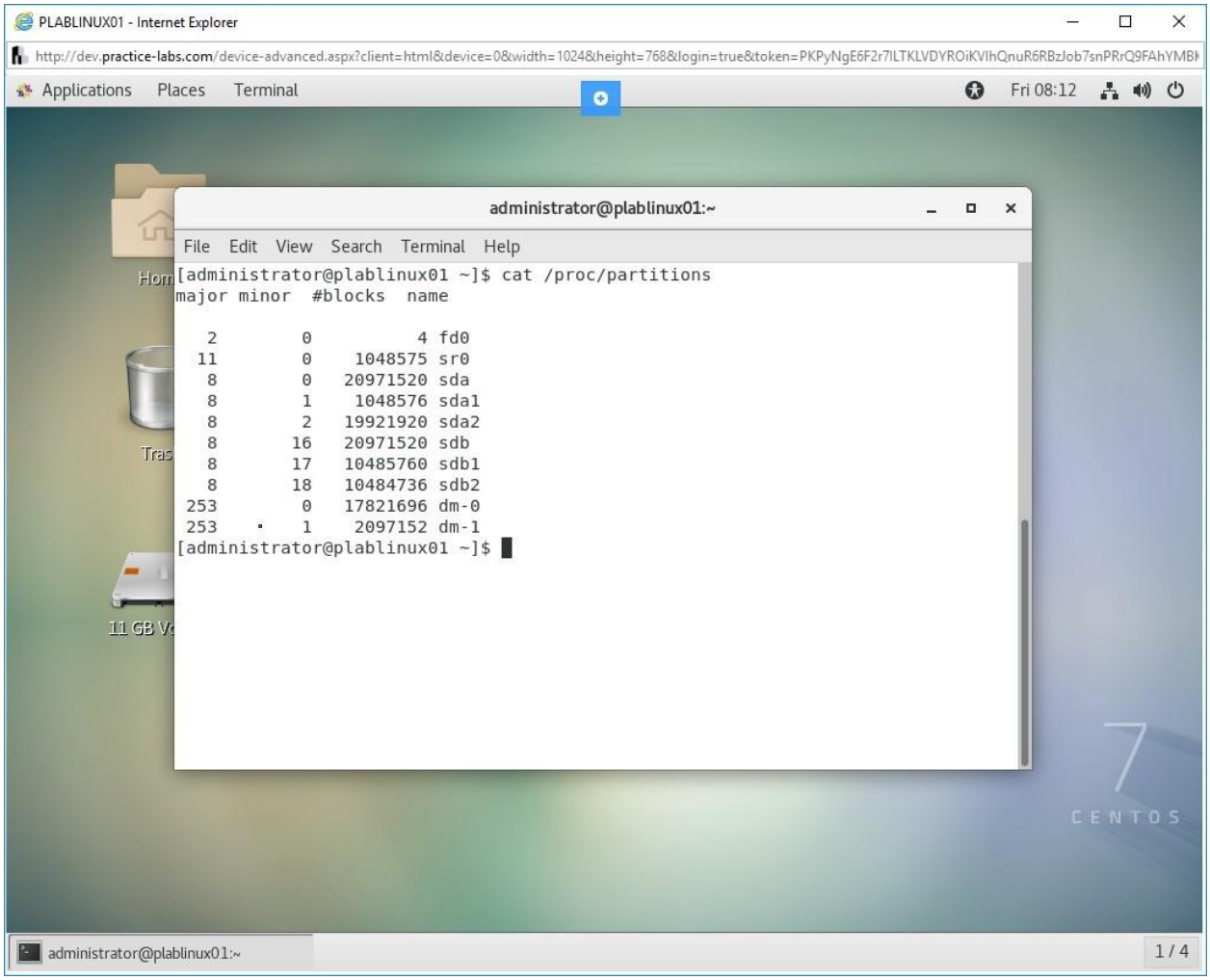

Figure 1.2 Screenshot of PLABLINUX01: Displaying /proc/partitions file.

Step 3

Similar to the partition and volume information, you can also view the mount points. Type the following command:

```
cat /proc/mounts
```

Press Enter.

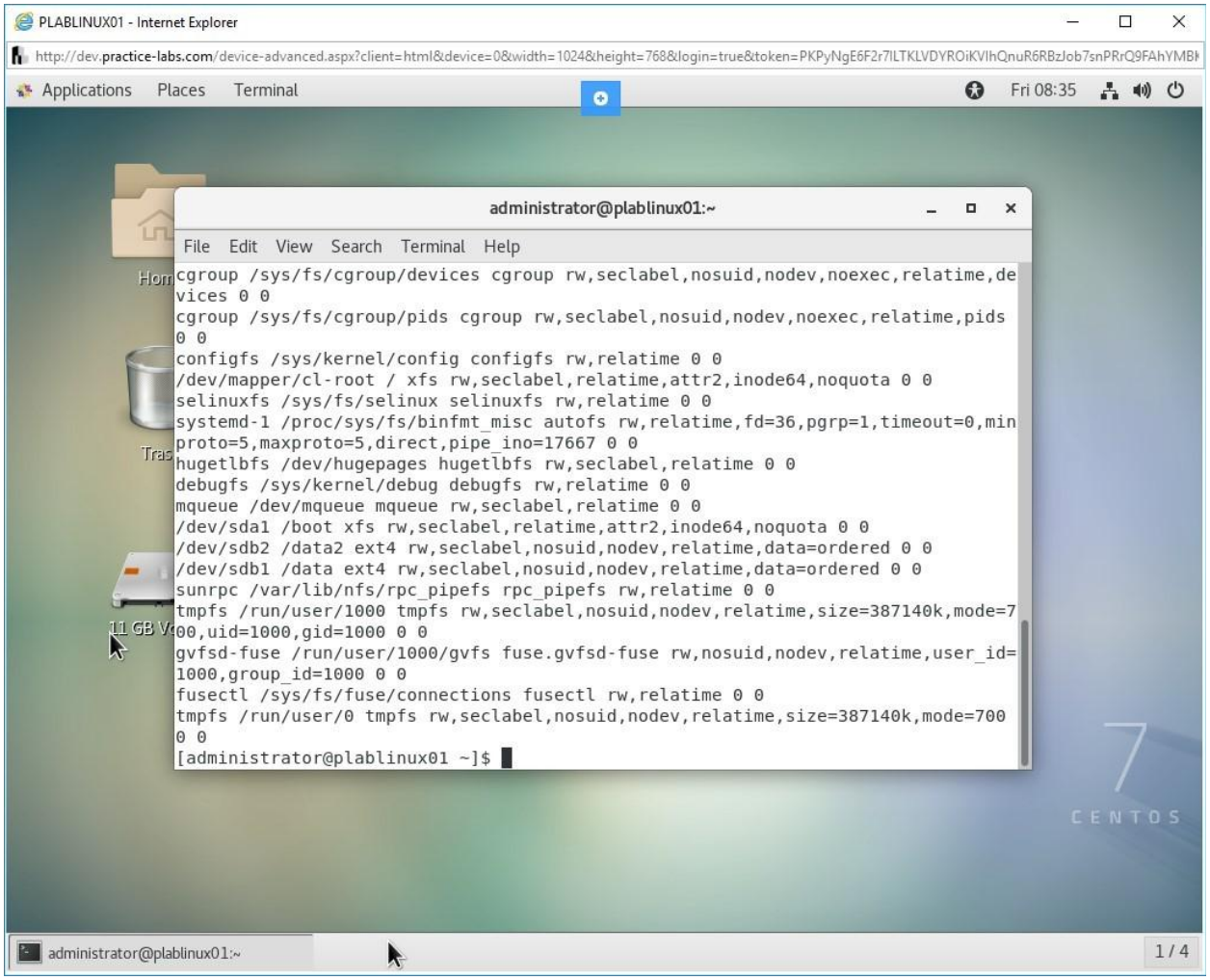

Figure 1.3 Screenshot of PLABLINUX01: Displaying /proc/mounts file.

Step 4

The df command can also display the information about the mounted filesystems. Type the following command:

```
df -h
```

Press Enter.

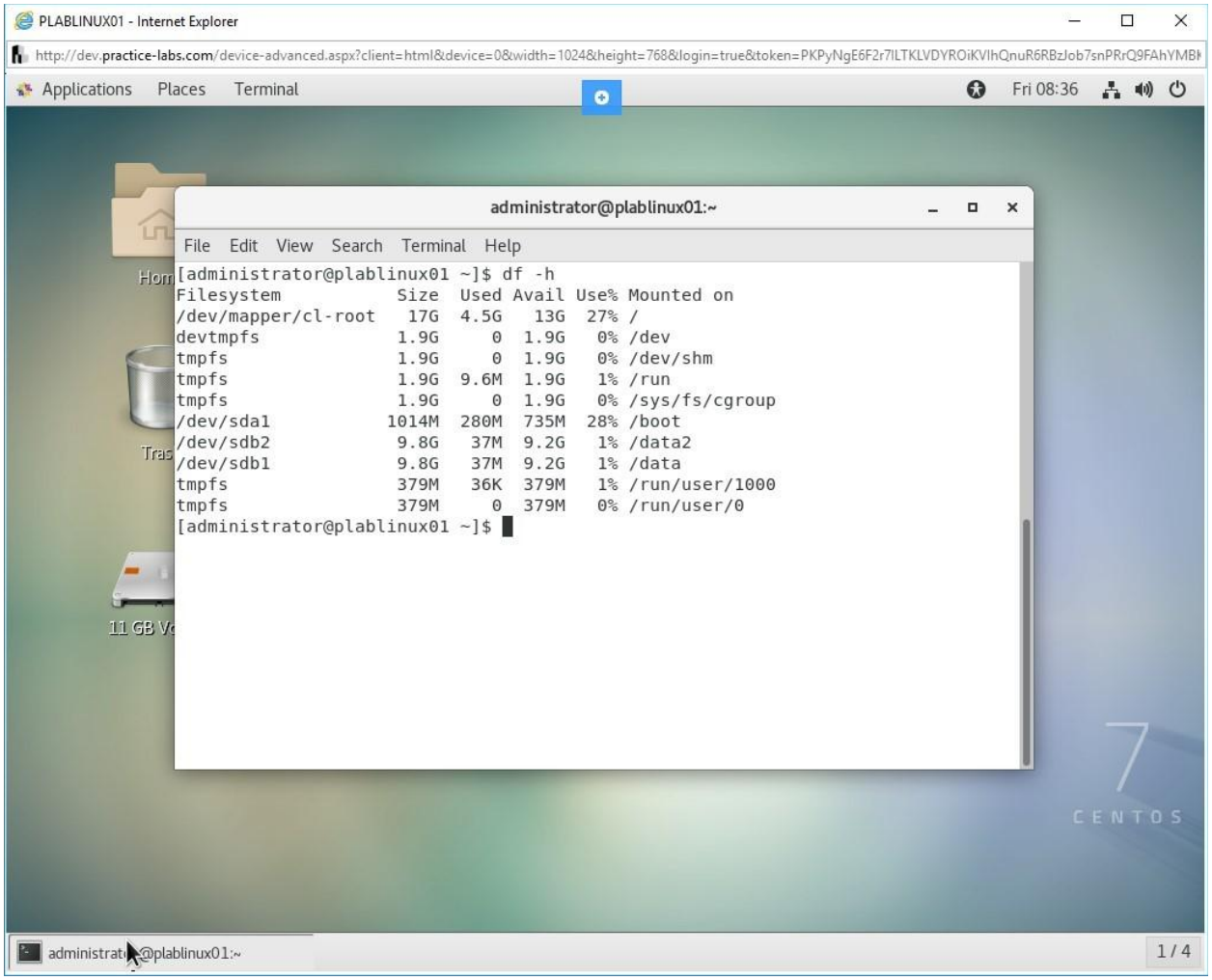

Figure 1.4 Screenshot of PLABLINUX01: Executing the df command.

Step 5

The parted command can also display and modify the partitions. Type the following command:

```
sudo parted -l
```

Press Enter.

When prompted, type the following password:

`Passw0rd`

Press Enter.

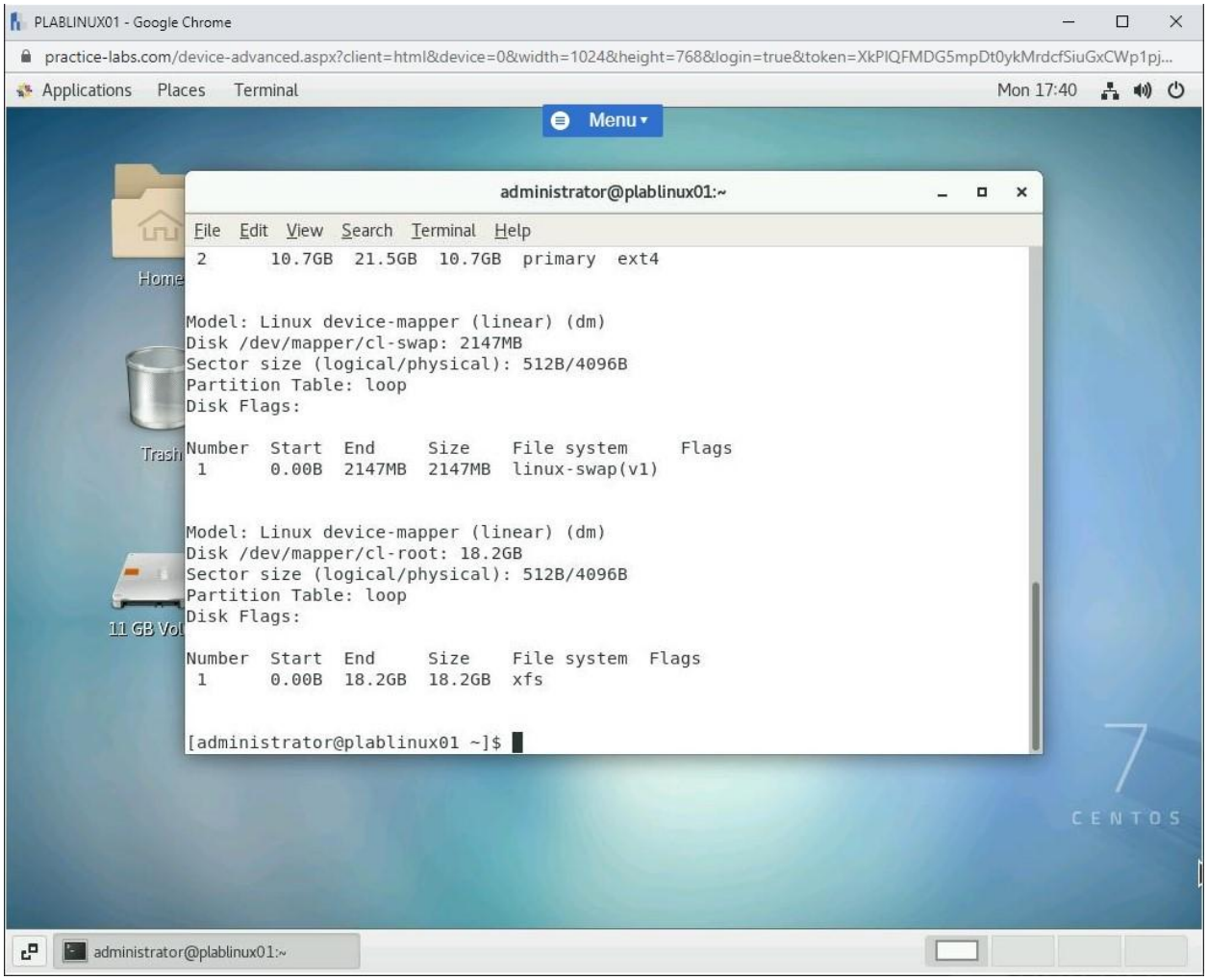

Figure 1.5 Screenshot of PLABLINUX01: Executing the parted command.

Step 6

The cfdisk utility is a partition editor that can display and modify the partitions. Type the following command:

```
sudo cfdisk
```

Press Enter. Press Ctrl + c to break the command.

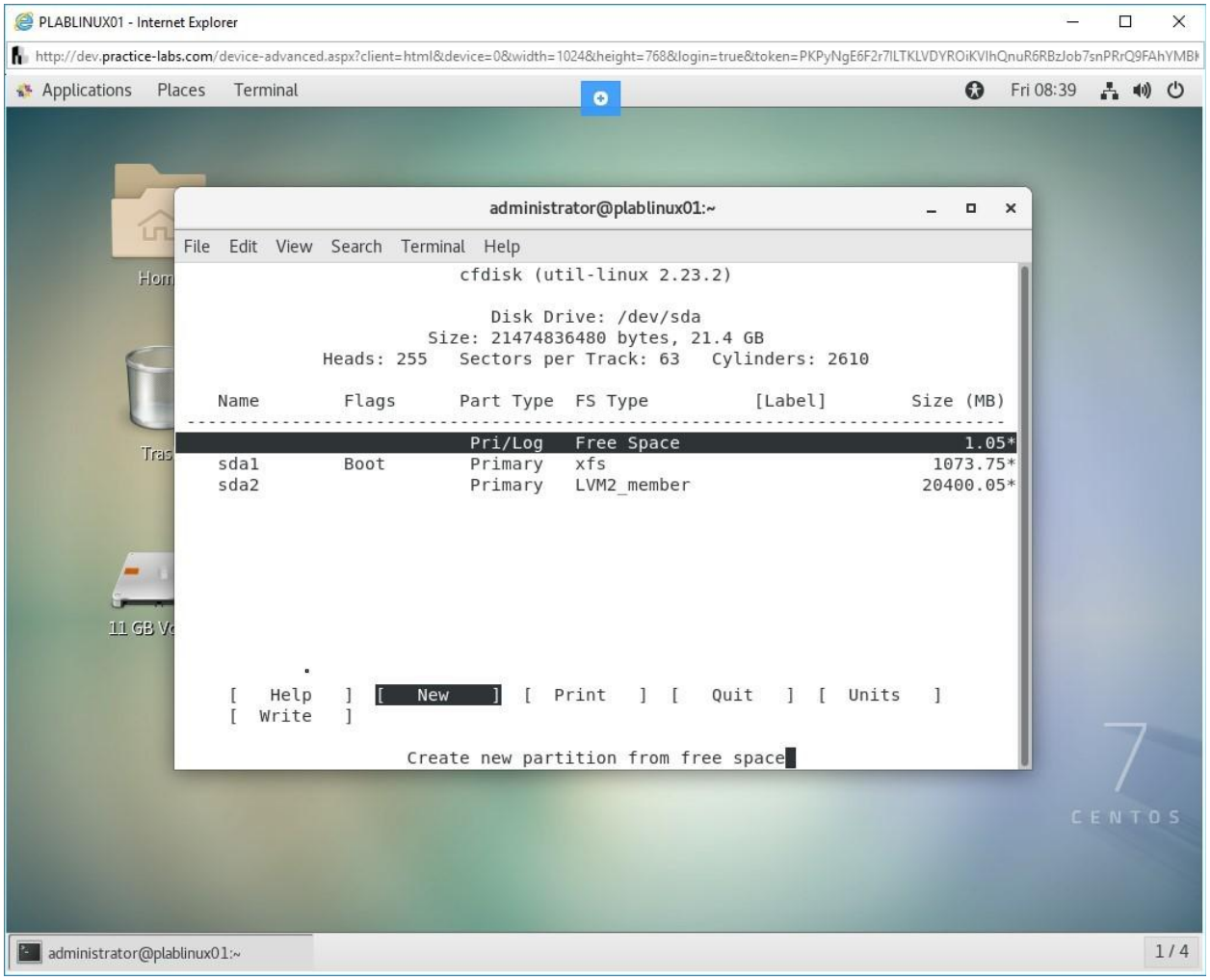

Figure 1.6 Screenshot of PLABLINUX01: Executing the cfutility.

Step 7

The sfdisk utility is a partition editor that can display and modify the partitions. Type the following command:

```
sudo sfdisk -l -uM
```

Press Enter.

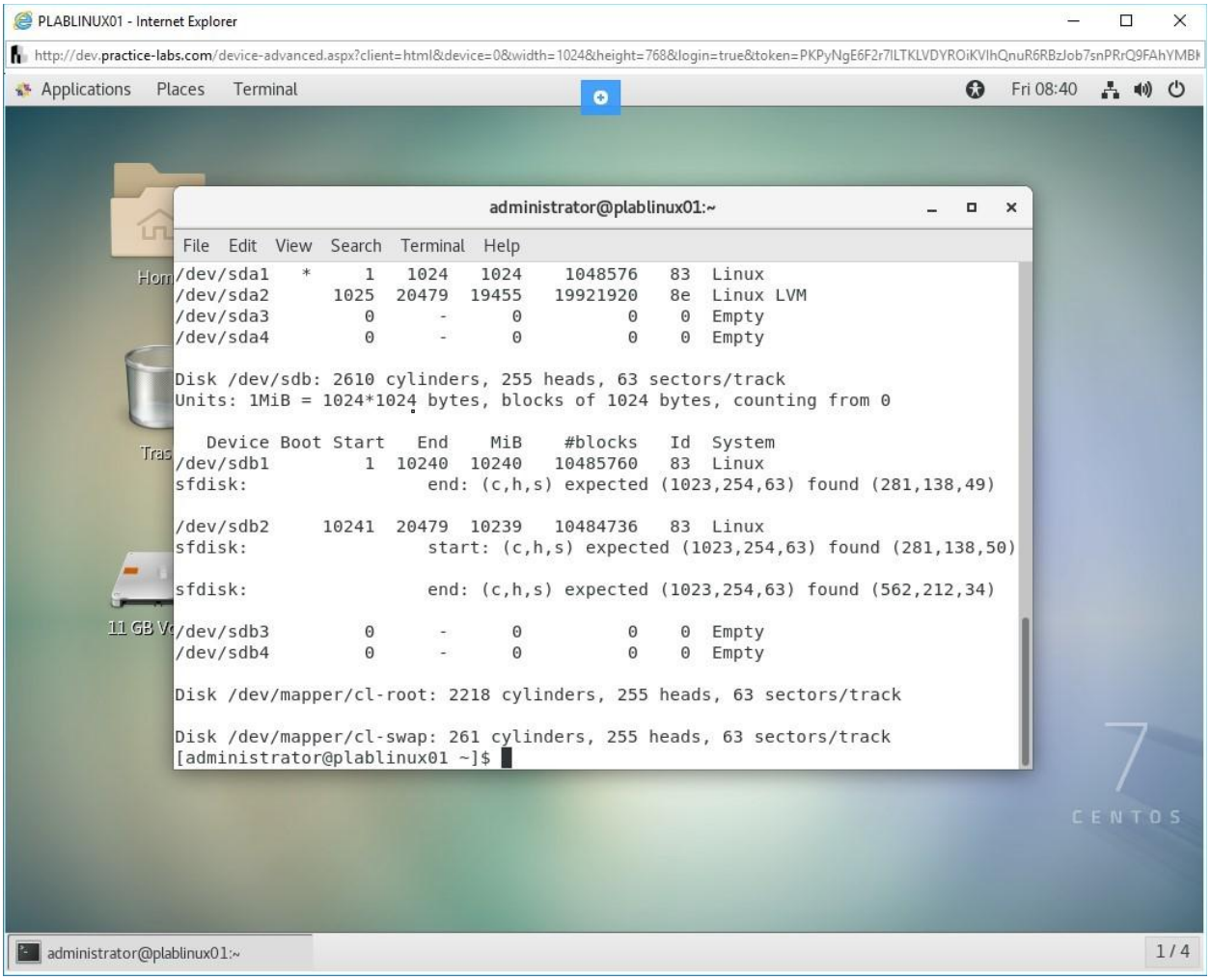

Figure 1.7 Screenshot of PLABLINUX01: Executing the sfdisk command.

Step 8

The fdisk utility is a partition editor that can display and modify the partitions. Type the following command:

```
sudo fdisk -l
```

Press Enter.

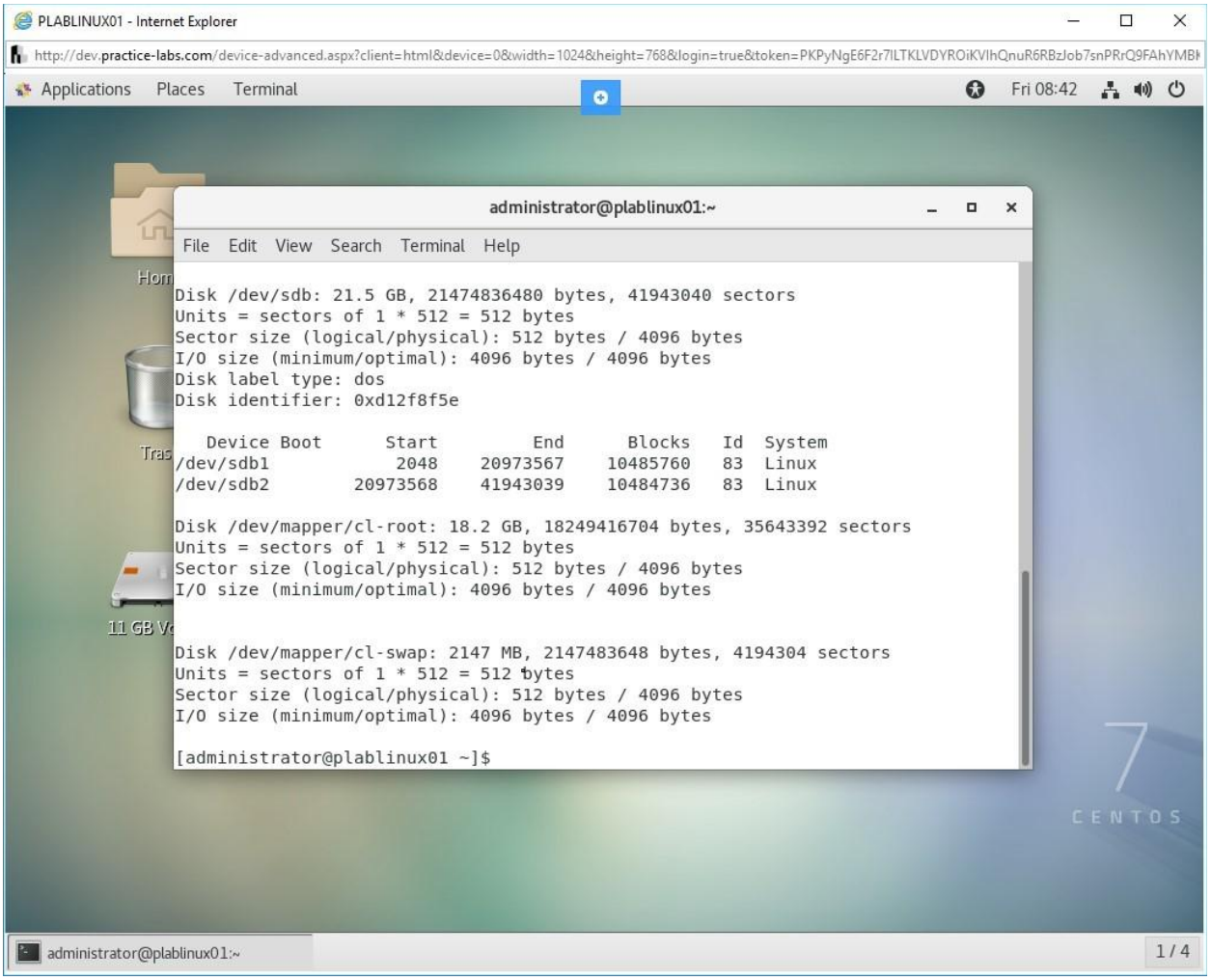

Figure 1.8 Screenshot of PLABLINUX01: Executing the fdisk command.

Step 9

The df utility is meant to list the disk space usage on filesystems. Type the following command:

```
df
```

Press Enter.

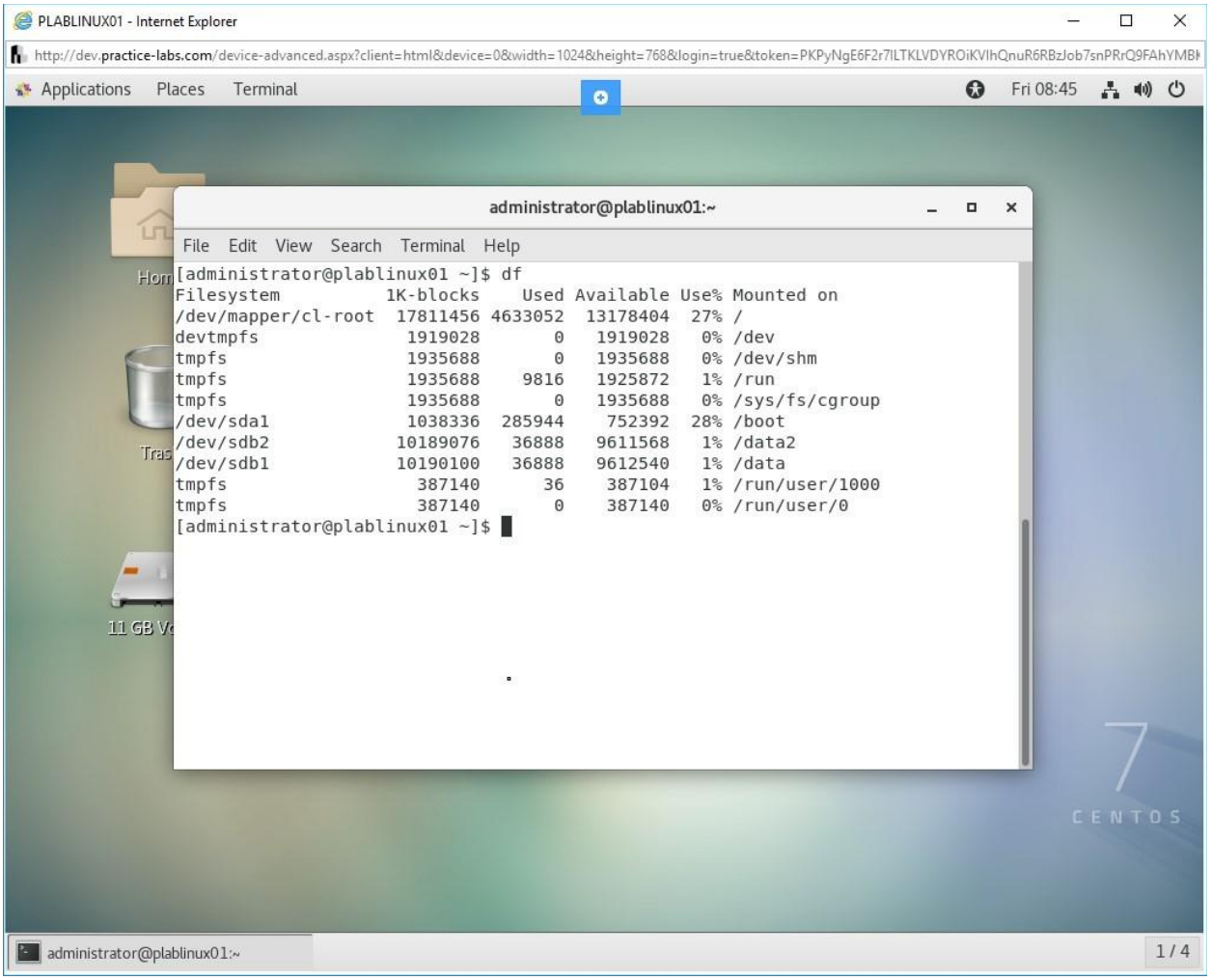

Figure 1.9 Screenshot of PLABLINUX01: Executing the df command.

Step 10

The lsscsi utility is meant to list the SCSI devices on a system. Type the following command:

```
lsscsi
```

Press Enter.

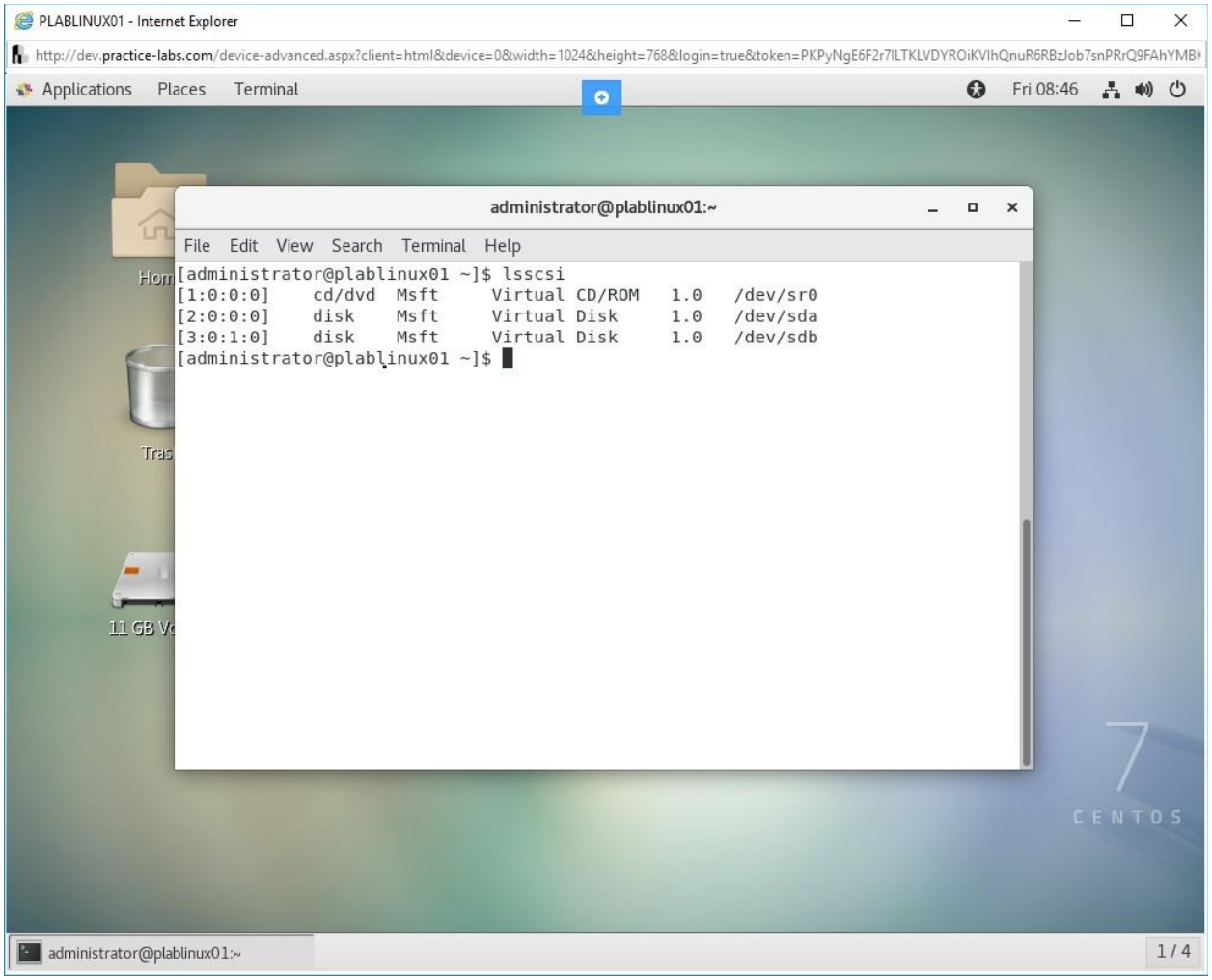

Figure 1.10 Screenshot of PLABLINUX01: Executing the lsscsi command.

Step 11

The smartctl utility is meant to print the drive information. Type the following command:

```
sudo smartctl -i /dev/sda
```

Press Enter.

If prompted, type the following password:

`Passw0rd`

Press Enter.

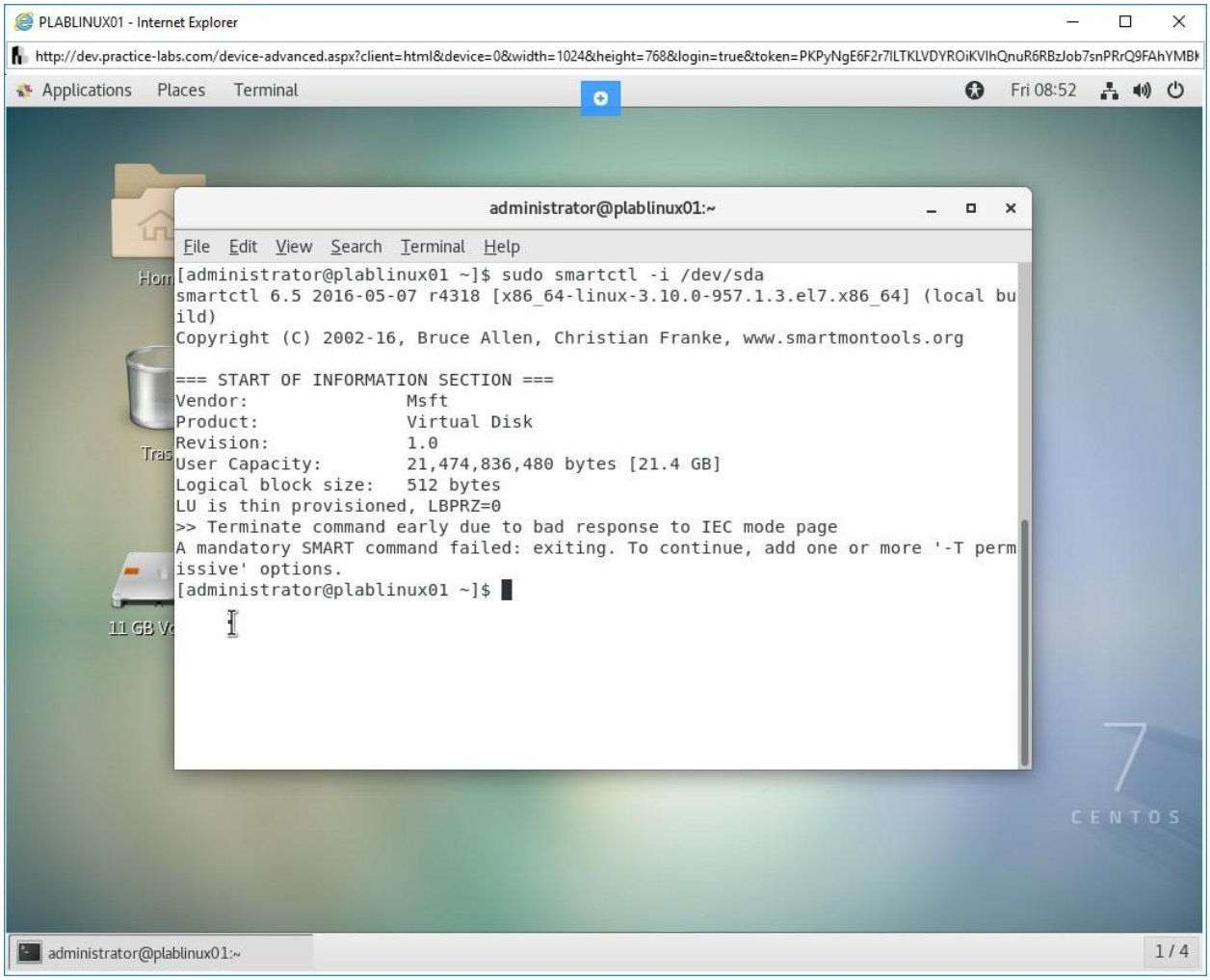

Figure 1.11 Screenshot of PLABLINUX01: Executing the smartctl command.

Step 12

You can determine the model and the serial number of your disk. Type the following command:

```
ls /dev/disk/by-id
```

Press Enter.

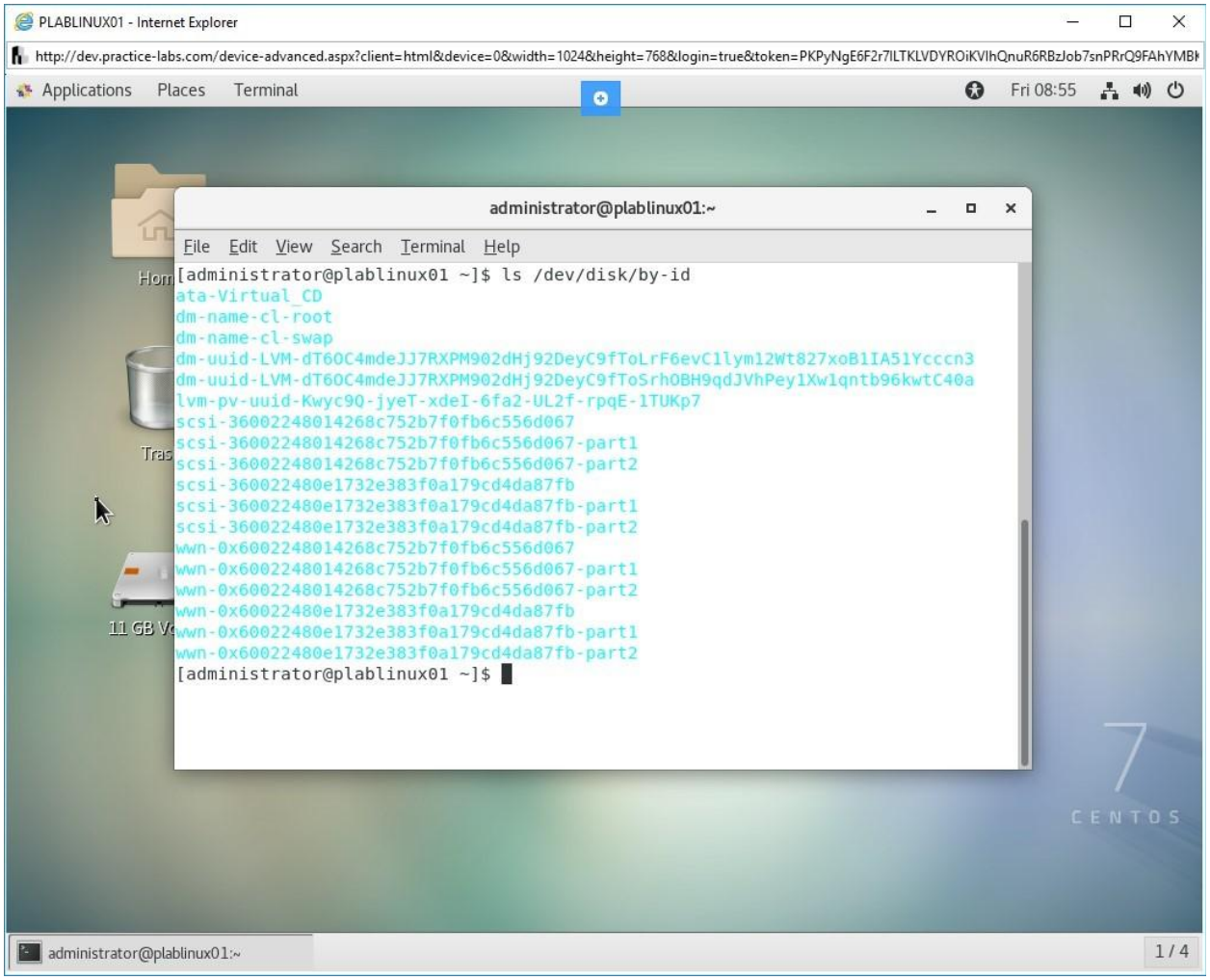

Figure 1.12 Screenshot of PLABLINUX01: Displaying the disks by disk id.

Keep all devices in their current state and proceed to the next exercise.

Review

Well done, you have completed the View the Hard Drive Details Practice Lab.

Summary

You completed the following exercise:

- Exercise 1 - View the Hard Drive Details

You should now be able to:

- Use various methods to view hard drive details