# Managing Services

## Scenario

Last week, you realized you really need to take a vacation. Luckily, this week is a partial week due to a holiday on Friday. As you start up the week, your project manager, Mrs. Y, sets aside plenty of tasks for you to do, but prioritizes them as low on your scale and can be done the following week if need be.

## Objectives

In this lab, you will:

* Check the status of the service **sshd** to ensure that it is running, and that you can make an ssh connection to the local host IP address
* View the current company folder structure using **du-a** and **ls -la $(find .)**

## Exercise 1: Check the Status of the sshd Service

As you get to your desk, thinking you have a mountain of work to complete due to the short week, you note a standard sized yellow sticky note with a short list of tasks. On top of the list, “What is wrong with the ssh on the Linux machine?”

Helpful Hint

You may have to use **sudo** to complete this exercise if you are not root.

### TODO

1. Use **ps** to check the status of the sshd service. Start the service if it is not running.
2. Test the ssh daemon by attempting to ssh to the 127.0.0.1 address to make sure you can log in as yourself via ssh.

### Steps

1. Validate that you are in the companyA folder by typing **pwd** and pressing ENTER.
2. Check the status of the sshd service. Type **ps auwx | grep sshd** and press ENTER.

[labsuser@centos companyA]$ ps auwx | grep sshd

root 1 0.0 0.0 112824 7872 ? Ss 01:52 0:00 /usr/sbin/sshd -D

root 116 0.0 0.0 150508 8956 ? Ss 02:07 0:00 sshd: labsuser [priv]

labsuser 118 0.0 0.0 150508 4332 ? S 02:07 0:00 sshd: labsuser@pts/0

labsuser 141 0.0 0.0 12532 2308 pts/0 S+ 02:10 0:00 grep --color=auto sshd

1. If the service is active, using your username(labsuser), first create a password using **sudo passwd USERNAME** and then type **ssh USERNAME@127.0.0.1** to connect to your local machine using ssh. You need to press **ENTER** after each command line.

Note

Use the following for your password: **MySecretPassword**

1. Type **yes** to accept the EULA and press ENTER to continue.
2. Type your password at the password prompt and press ENTER.
3. When connected using ssh, type **exit** and press ENTER to leave the current ssh session.

[labsuser@centos ~]$ sudo passwd labsuser

Changing password for user labsuser.

New password:

Retype new password:

passwd: all authentication tokens updated successfully.

[labsuser@centos ~]$ ssh labsuser@127.0.0.1

The authenticity of host '127.0.0.1 (127.0.0.1)' can't be established.

RSA key fingerprint is SHA256:PCmKGoqAB94DsPBTDaYRIY9ctCCukPqLXNaMVTI9yNI.

RSA key fingerprint is MD5:29:6b:3e:29:bd:30:31:33:6c:d1:fa:ab:51:6e:db:d5.

Are you sure you want to continue connecting (yes/no)? yes

Warning: Permanently added '127.0.0.1' (RSA) to the list of known hosts.

labsuser@127.0.0.1's password:

Last login: Wed Aug 21 19:18:16 2019

[labsuser@centos ~]$

## Exercise 2: Create a File Audit Log

1. It has been an amazingly short week, but there is still one task remaining on your sticky note. Print a listing of all files and folders along with the human readable size, and modified time of all files in the company directory.

Helpful Hint

You may have to use **sudo** to complete this exercise if you are not root.

### TODO

1. Using the **du -a** command, print the estimated file space usage of **companyA**.
2. Use the **ls** and **find** commands together to view the directory listing of all files.

### Steps

1. Validate that you are in the **companyA** folder by typing **pwd** and pressing ENTER.
2. Type **du -a** and press ENTER to see all of the write counts for all files.
3. Type **ls -laR $(find .)** to print the directory listing.

Note

See following for visual of **ls -laR**.

[labsuser@centos companyA]$ ls -laR

.:

total 44

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 .

drwxrwx--- 1 labsuser 48 4096 Aug 25 01:52 ..

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 .CEO

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 Employees

-rw-r--r-- 1 labsuser 1001 2464 Aug 25 01:51 FolderListing.csv

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 HR

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 Management

-rw-r--r-- 1 labsuser 1001 0 Aug 25 01:51 Roster.csv

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 Sales

-rw-r--r-- 1 labsuser 1001 3958 Aug 25 01:51 securecopy.txt

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 SharedFolders

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 Shipping

./.CEO:

total 12

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 .

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 ..

-rw-r--r-- 1 labsuser 1001 2680 Aug 25 01:51 CompanyAudit.csv

./Employees:

total 8

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 .

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 ..

./HR:

total 24

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 .

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 ..

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 Employees

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 Finance

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 Management

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 NewHires

./HR/Employees:

total 8

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 .

drwxr-xr-x 1 labsuser 1001 4096 Aug 25 01:51 ..

-rw-r--r-- 1 labsuser 1001 0 Aug 25 01:51 Layoffs.csv

-rw-r--r-- 1 labsuser 1001 0 Aug 25 01:51 MonthlyAssessments.csv

-rw-r--r-- 1 labsuser 1001 0 Aug 25 01:51 YearlyAssessments.csv

Figure: Sample view of ls -laR $(find .)

END OF LAB