# Users and Groups

# Scenario

New week, same deal. Mr. X has come to you this week with a new set of requirements with a little bit more difficulty but with the same Friday paid vacation. He may get into some trouble giving all these paid vacation days. Who cares? The beach was amazing. In continuation of the Linux setup, Mr. X needs to set up some basic user information for the company. He has a list of each section as well as who needs to be admins.

# Objectives

In this lab, you will:

* Create new users with a default password
* Create groups and assign the appropriate users
* Create a user login log file specifically for the company to share

## Exercise 1: Create Users

Back to the grind, your first task of the week is to create new users based on the user sheet that Mr. X provided. Ensure you spell the userid correctly so they can use default credentials to log in.

Helpful Hint

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

### TODO

1. Create users in the CentOS from the list shown in the figure.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| First Name | Last Name | userid | Job Role | Starting password |
| Alba | Hitt | ahitt | Sales Representative | P@ssword1234! |
| Caleb | Tee | ctee | HR Manager | P@ssword1234! |
| Cory | Runion | crunion | HR Specialist | P@ssword1234! |
| Doyle | Olberding | dolberdi | Finance Manager | P@ssword1234! |
| Edmond | Dillinger | edilling | Personnel Manager | P@ssword1234! |
| Eldridge | Mcbath | emcbath | CEO | P@ssword1234! |
| Eloy | Leonard | eleonard | Shipping Manager | P@ssword1234! |
| Fran | Stafford | fstaffor | Shipping | P@ssword1234! |
| Gilbert | Arrington | garringt | Shipping | P@ssword1234! |
| Hester | Mccullar | hmcculla | Shipping | P@ssword1234! |
| Irwin | Steinke | isteinke | Sales Manager | P@ssword1234! |
| Kimber | Krawczyk | kkawczy | Shipping | P@ssword1234! |
| Lynetta | Chaloux | lchaloux | Shipping | P@ssword1234! |
| My | Molinar | mmolinar | Shipping | P@ssword1234! |
| Shea | Blunt | sblunt | Sales Representative | P@ssword1234! |
| Shelba | Zane | szane | Sales Representative | P@ssword1234! |
| Temple | Mickley | tmickley | Shipping | P@ssword1234! |
| Waldo | Leist | wleist | Finance Specialist | P@ssword1234! |
| Woodrow | Trumbauer | wbrumbau | HR Specialist | P@ssword1234! |
| Ying | Halliday | yhallida | Sales Representative | P@ssword1234! |

### Steps

1. Validate that you are in the home folder of your current user by typing **pwd** and pressing ENTER.
2. Type **sudo** **useradd ahitt -p P@ssword1234!** and press ENTER to create the user **ahitt** with the default password.

Note

You may be required to enter your password for the first **useradd** command.

1. Validate users have been created by typing **sudo getent passwd | cut -d: -f1** and pressing ENTER.
2. Repeat step 2 and 3 for the remaining list of userids from the table on the preceding page.

Note

This command is purely to visualize the created users and not necessary to remember for now.

[labsuser@centos ~]$ sudo getent passwd | cut -d: -f1

root

bin

daemon

adm

lp

sync

shutdown

halt

mail

operator

games

ftp

nobody

systemd-network

dbus

sshd

labsadmin

labsuser

ahitt

ctee

crunion

dolberdi

edilling

emcbath

eleonard

fstaffor

garringt

hmcculla

isteinke

kkawczy

lchaloux

mmolinar

sblunt

szane

tmickley

wleist

wbrumbau

yhallida

## Exercise 2: Create Groups

Mr. X thinks you may have some great potential but wants to see more action. He wants you to create the following groups:

* Sales
* HR
* Finance
* Personnel
* CEO
* Shipping
* Managers

When created, add the proper users to the proper groups based on the list provided in the figure for exercise 1.

Note

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

### TODO

1. Create all the groups and add the appropriate users to them. Watch out! Managers are personnel, but not all personnel are managers. Some users will belong to multiple groups.

Steps

1. Validate that you are in the home folder of your current user by typing **pwd** and pressing ENTER.
2. Create the group **Sales** by typing **sudo groupadd Sales** into the terminal and pressing ENTER.

Example : sudo groupadd editorial

1. Repeat step 2 for the **HR, Finance, Personnel, CEO, Shipping,** and **Managers** groups.
2. Add the user ahitt to the Sales group by typing sudo usermod **-a -G Sales ahitt** into the terminal and press ENTER.

Example : sudo usermod -a -G groupname username

1. Repeat step 4 by using the following table to add users to the appropriate groups.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Group Name | Usernames | Group name | Usernames | Group Name | Usernames |
| Sales | * sblunt * szane * yhallida | HR | * ctee * crunion * wtrumbau | Finance | * dolberdi * wleist |
| Shipping | * eleonard * fstaffor * garringt * hmcculla * kkrawczy * lchaloux * mmolinar * tmickley | Managers | * ctee * dolberdi * edilling * eleonard * isteinke | CEO | * emcbath |

1. Ensure all personnel are added to the **Personnel** group.
2. Add YOURUSERNAME to all groups.
3. Check the group memberships by typing **sudo getent group** into the terminal and pressing ENTER.

Sales:x:1021:labsuser,ahitt,sblunt,szane,yhallida

HR:x:1022:labsuser,ctee,crunion,wtrumbau

Finance:x:1023:labsuser,dolberdi,wleist

Personnel:x:1024:ahitt,ctee,crunion,dolberdi,edilling,emcbath,eleonard,fstaffor,garringt,hmcculla,isteinke,kkrawczy,lchaloux,mmolinar,szane,tmickley,wleist,wtrumbau,yhallida,sblunt

CEO:x:1025:emcbath,labsuser

Shipping:x:1026:labsuser,eleonard,fstaffor,garringt,hmcculla,kkrawczy,lchaloux,mmolinar,tmickley

Managers:x:1027:labsuser,ctee,dolberdi,edilling,eleonard,isteinke

## Exercise 3: Create a Log File

Now that you have some users in your machine, you need to do some basic authentication audit sharing with your partners. In your log file, **logins.csv**, you will need to add in the date/time and username that logged in.

Helpful Hints

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

### TODO

1. Create the log file **logins.csv** and place it in the **SharedFolders** directory.

### Requirement

* HEADER of CSV minimum requirement – contains Date, Time, Username.

### Steps

1. Validate that you are in the **/home/YOURUSERNAME/companyA** folder by typing **pwd** and pressing ENTER.
2. Using the **touch** command in the terminal, create the file **logins.csv** in the **SharedFolders** directory by typing **touch SharedFolders/logins.csv** and pressing ENTER.
3. Read and search the **/tmp/log/secure** file looking for the word LOGIN by typing **sudo cat /tmp/log/secure | grep password > SharedFolders/logins.csv** into the terminal and pressing ENTER.

Note

Usually, the secure log file is located at **/var/log/secure**. For the purposes of this lab, we are presenting a sample secure log file at /tmp/log/secure.

1. Validate your work by typing **cat SharedFolders/logins.csv** into the terminal and pressing ENTER.

### Example Output

Aug 30 13:55:09 centos7 sshd[10119]: Failed password for root from ::ffff:211.155.31.54 port 49700 ssh2

Aug 30 13:55:10 centos7 sshd[10113]: Failed password for root from ::ffff:211.155.31.54 port 49705 ssh2

Oct 2 01:41:51 centos7 sshd[13986]: Accepted password for test from ::ffff:203.125.11.170 port 48916 ssh2

Oct 2 01:41:51 centos7 sshd[13987]: Accepted password for test from ::ffff:203.125.11.170 port 48913 ssh2

Dec 9 10:14:11 centos7 sshd[16215]: Failed password for root from ::ffff:204.92.87.171 port 47779 ssh2

Dec 9 10:14:11 centos7 sshd[16219]: Failed password for root from ::ffff:204.92.87.171 port 47793 ssh2

Dec 9 10:14:11 centos7 sshd[16212]: Failed password for root from ::ffff:204.92.87.171 port 47774 ssh2

Dec 9 10:14:11 centos7 sshd[16217]: Failed password for root from ::ffff:204.92.87.171 port 47786 ssh2

Dec 9 11:45:50 centos7 sshd[16349]: Accepted password for root from ::ffff:63.126.79.65 port 32768 ssh2

Dec 9 11:49:03 centos7 sshd[16398]: Accepted password for root from ::ffff:63.126.79.65 port 32769 ssh2

Dec 9 11:52:05 centos7 sshd[16414]: Accepted password for root from ::ffff:63.126.79.65 port 32770 ssh2