Old Dominion University

CYSE 270 Linux System for Cybersecurity

Assignment #4 Group and User Accounts

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**Below is the snippet of a sample lab report.**

Task A

1. Open a terminal window.

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**Your explanation goes here. For example:**  
I opened the terminal for Ubuntu.

1. Execute the correct command to display user account information (including the login shell and home directory) for the current user using grep.

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**Your explanation goes here. For example:**  
In order for me to display user account information for the current user utilizing grep, I typed cat /etc/passwd | grep Alysia. Cat /etc/passwd shows all user information while grep command gets information from the user account.

1. Execute the correct command to display user password information (including the encrypted password and password aging) for the current user using grep.

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**Your explanation goes here. For example:**  
I typed the command sudo cat /etc/shadow | grep Alysia in order to see the password information such as encrypted password and password aging; I can also see the current user.

1. Create a new user named xxxxx and explicitly use options to create the home directory /home/xxxxx for this user.

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**Your explanation goes here. For example:**  
I utilized the command sudo useradd -m -k /etc/skel abeck012 to create a new user named after my MIDAS, and utilized options to create the home directory /home/abeck012 for my new abeck012 user. Useradd enables me to add users while /etc/skel allows me to contents of a specific directory is copied to the new user’s home directory. Also -m allows me to create a user’s home directory while -k enables me to override /etc/login.defs defaults.

1. Set a password for the new user.

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**Your explanation goes here. For example:**  
I typed the command sudo passwd abeck012 in the terminal to create a password for my new user account.

1. Set bash shell as the default login shell for the new user xxxxx, then verify the change.

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**Your explanation goes here. For example:**  
In order to set bash shell as the default login shell for the new user abeck012 I typed the command sudo usermod -s /bin/bash abeck012. To verify the change I typed tail -5 /etc/passwd to see the users at the end of the first five lines.

1. Execute the correct command to display user password information (including the encrypted password and password aging) for the new user xxxxx using grep.

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**Your explanation goes here. For example:**  
I utilized the command sudo cat /etc/shadow | grep abeck012 to showcase user password information for my new user abeck012 using grep. Cat /etc/shadow command displays emcrypted passwords and password aging.

1. Add the new user xxxxx to sudo group without overriding the existing group membership.

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**Your explanation goes here. For example:**  
In order to add the newuser abeck012 to the sudo group without overriding the existing group membership, I typed sudo usermod -G sudo abeck012; the -G prevents the command from completely replacing the sudo membership. -G enables abeck012 to join the sudo membership.

1. Switch to the new user’s account, then continue Task B.

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**Your explanation goes here. For example:**  
In order to switch my user account from Alysia to abeck012, I typed su abeck012 in the terminal.

Task B

1. Open a terminal window and determine the shell you are using.

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**Your explanation goes here. For example:**  
I typed the command echo $SHELL to determine the shell that I was utilizing, which was /bin/bash.

1. Display the current user’s ID and group membership.

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**Your explanation goes here. For example:**  
I typed the command id in the terminal in order to see the user’s ID and group membership. The UID, GID, and groups such as abeck012 and sudo listed.

1. Display the group membership of the root account.

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**Your explanation goes here. For example:**  
I typed the command groups root in order to showcase the membership of the root account.

1. . Run the correct command to determine the user owner and group owner of the /etc/group file.

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**Your explanation goes here. For example:**  
I typed the command ls -l /etc/group to see the user owner and group owner of the /etc/group file. It appears that the user/owner root had ownership of /etc/group.

1. Create a new group named test and use your UIN as the GID.

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**Your explanation goes here. For example:**  
I created the group test and changed the GID to my UIN by typing sudo groupadd -g 1127384 test in the terminal. The -g enables me to choose the GID to the test group.

1. Display the group account information for the test group using grep.

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**Your explanation goes here. For example:**  
The command cat /etc/group | grep test enabled me to see the test group account information in the terminal.

1. Change the group name of the test group to newtest.

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**Your explanation goes here. For example:**  
In order to change the group name from test to newtest, I typed the command sudo groupmod -n newtest test. -n enables me to change the group name.

1. Add the current account (xxxxx) as a secondary member of the newtest group without overriding this user’s current group membership.

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**Your explanation goes here. For example:**  
I typed the command sudo usermod -a -G newtest abeck012 in order to append the new group to the user’s secondary group. -G is meant to not override the user’s current group membership while -a appends the command.

1. Create a new file in the account’s home directory, then change the group owner to newtest.

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**Your explanation goes here. For example:**  
I typed sudo touch happy.txt in the terminal in order to create a new file. The command sudo chgrp newtest happy.txt enabled me to change the group owner of the file to newtest. Therefore, the group newtest had ownership over the happy.txt.

1. Display the user owner and group owner information.

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**Your explanation goes here. For example:**  
I typed the command ls -l happy.txt to see the user owner and group owner information; the group newtest had ownership of the happy.txt file.

1. Delete the newtest group, then repeat the previous step. What do you find?

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**Your explanation goes here. For example:**  
I deleted the newtest group by typing sudo groupdel newtest. Then, I retyped ls -l happy.txt to see the the group newtest no longer had ownership of the file nor existed.

1. Delete the user xxxxx along with the home directory using a single command.

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**Your explanation goes here. For example:**  
I typed sudo userdel -r abeck012 in terminal because I wanted to delete the abeck012 user account along with the home directory.