Managing Users and groups

Managing User Accounts

- Managing user accounts involves adding, modifying and deleting user accounts and account's information
- Add user accounts use useradd or adduser
- modify use usermod
- delete use userdel
- make sure to use sudo
- The /etc/login.defs file contains directives for use in various shadow password suite commands
- The /etc/default/useradd file stores the system default configuration for creating new users with the useradd utility
- to view the default parameters use either
    - useradd -D
    - cat /etc/default/useradd
- The /etc/passwd file stores information about every user account in a Linux system
- The /etc/shadow file contains information about the users' passwords

Creating a user with useradd

- The useradd utility, in Ubuntu, is considered a low-level utility and should not be used. This utility is the standard in most linux distros. The adduser utility uses the useradd utility in the "backend".
- -md options needed for adding a home directory to a user
- /home/student is the new users home directory
- -s used for specifying the users login shell
- /bin/bash is the new users login shell
- students is the users username

Viewing a user's account info

- The grep command is used to see the students user information - grep student /etc/passwd/
- The second one is used to see password information about the new user. ! means there is no password set - sudo grep student etc/shadow/
- The third shows the content of the students user home directory - ls -A /home/student/
- the fourth shows the content of the skel directory which must be the same as the new user's home directory - sudo ls -A /etc/skel/
- The getent utility can be used to view information about a user's account and password - getent passwd student - sudo getent shadow student

Maintaining Passwords

- The useradd does not create a password for the users, the passwd utility does
- To change password of another user - passwd + username
- to change password of the current user - passwd with no argument
- The passwd utility can also lock and unlock account with the -l and -u options

- -d delete
- -e expire
- -i inactive
- -l lock
- -n minimum
- -s status
- -u unlock
- -w warning or warndays
- -x maximum or maxdays
- Chage is also another utility to work with passwords
    - It can modify and display user information

Deleting User Accounts

- userdel utility and the most common option to use is -r
- This option will delete the accounts home directory tree and any files within it
- Delete the sampleuser account sudo userdel -r sampleuser

Managing Groups

- sudo group user shows the group name that the usr belongs to.
- to create a new group - sudo groupadd groupname
- To add a user to a new group add, the group must preexist - sudo getent group groupname
- sudo usermod -aG groupname user allows you to add the DAdams account as a member of the project42 group but the -a switch is important because it preserves only previous DAdams account group memberships

Delete me

- Groups can also have passwords but is not a good idea
- The /etc/shadow/ file is where group passwords are stored
- If you need to modify a group us groupmod - sudo groupmod then whatever variable you need.

Querying Users

- Whoami displays what user account you are currently using
- Who provides a little more data than whoami utility. You can view information concerning your own account or look at every current user on the system.
- W shows who is logged on and what they are doing
- Id utility allows you to pull out various data concerning the current process. it also displays information for any account whose identification you pass to id as an argument
- Last pulls information from the /var/log/wtmp fie and displays a list of accounts showing the last time they logged in/out the system or if they are still logged on. It also shows when the system reboot occurs and when the wtmp file was started