* User and group management

Users:

1. *Local user $* [normal user]

* Need to access files and folders stored on the computer.
* Has a limited access to computer resources

1. *Root user #* [super user/administrator]

* **The root account has  all the *privileges*.** This means it can read and write any files on the system, perform operations as any user, change system configuration, install and remove software, and upgrade the operating system

1. *System user*

* created by system itself when we install any service to perform necessary activities where no human intervention needed
* It has no-login shell

***Que.How to add new user?***

-->useradd username

-->adduser username

***Que. How to set password to user?***

-->passwd username

>this command will help you to set password for user

**Note**: if you want to set password for current or root user use #passwd

***Que. How to delete user?***

-->userdel username [it will only delete user]

-->userdel -r username [it will remove user with home dir]

***Que. What happens when we add new user to system?***

1. **Home/username**  >home directory of user created

2. copy files from **/etc/skel/** to **/home/username/**

.bashrc ------> helps to login into the system

.bash\_logout ------> helps to logout from the system

.bash\_profile ------> creates Home directory of user

**Note**: to view above files use ls -a (shows hidden files)

#ls -a /home/username

3. **/etc/passwd** ------->it stores profile related info of user

#tail -1 /etc/passwd

1. **/etc/shadow**  ------> it consist of user password

*5. /etc/group ------->group info such as group name,gid & list of members*

*6. /etc/gshadow ------->it consists of group password*

**Note**: when you add a new user in system,the primary group will be created with the same name as user

7. **/var/spool/mail/username**  ---->all the user’s mails will be stored here

***Que. What are the Fields of /etc/passwd ?***



[username:X:8183:8183:comment:/home/username:/bin/bash]

1.username

2.encrypted password

3.uid

4.gid

5.comment

6.path of home directory

7.login shell

***Que. How to add user with customization:***

***Syntax****-*

*# useradd <options> <parameters> <username>*

-->useradd -u 2023 user1

>to assign customized **uid** while user creation

-->useradd -m -d /Dev/user3 user3

>assign diff home directory

-->useradd -s /sbin/nologin user4

>assign no login shell to user[user wont be able to login ]

-->useradd -c “development ” user5

>add comment

-->useradd -M Barry

>home directory of user will not be created

***Que.How to modify existing user with customization:***

***Syntax-***

*# usermod <option> <parameters> <username>*

-->usermod -u 2023 user1

>to assign customized **uid** while user creation

-->usermod -m -d /Dev/user3 user1

>assign diff home directory

-->usermod -s /sbin/nologin user1

>assign no login shell to user[user wont be able to login ]

-->usermod -c “development team” user1

>add comment

-->usermod -M user1

>home directory of user will not be created

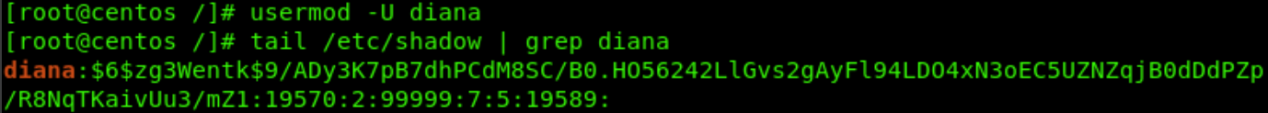
-->usermod -L user1

>lock user password

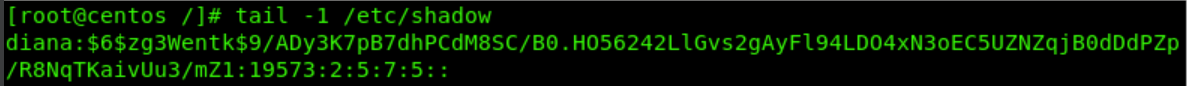


#usermod -U user1

>unlock user password



***Que. Explain Fields of /etc/shadow file?***



1 username

2 encrypted password

3 last password change

4 minimum days between password change

5 maximum days between password change

6 warning for password change

7 inactive days

8 expiry date

9 future use

***Que. Explain password policy ?***

-->A password policy defines the password strength rules that are used to determine whether a new password is valid

->chage -l

-l list or view

-m min days > chage -m 3 username

-M max days > chage -M 15 username

-I inactive days > chage -I 7 username

-E expiry date > chage -E '2023-9-1' username

-d force to change password

-W warning

**Change password policy:**

*Syntax-*

*# chage <option> <parameters> <username>*

#chage -l username --to list pass policy

#chage -m 2 username --min days between pass change

#chage -M 20 username --max days between pass change

#chage -I 5 username --set inactive days for user

#chage -W 7 username --set warning days to change pass

#chage -E ‘2023-8-15’ username --set expiry date for user

Groups:

> Group is the collection of users

***Que.what are the Fields of /etc/group ?***

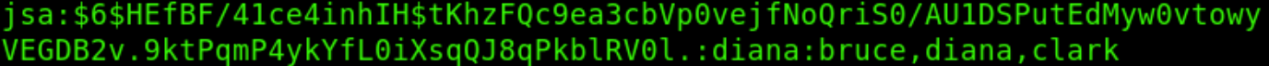




* Group name
* Redirected group password
* Group id
* List of members in the group

***Que. Exxplain the Fields of /etc/gshadow***





* Group name
* Encrypted group password
* Group admin
* List of members in the group

***Que.How to create group?***

-->groupadd groupname

***Que.How to delete group?***

-->groupdel groupname

-->groupdel -f groupname ---for forcefully delete group

***Que.How to Add user to group?***

**1>#**usermod -aG groupname username

>**to add already existing user to group**

2>#useradd -G groupname username

>to create new user and add it to the group

3>using gpasswd:

*Syntax-*

*# gpasswd <option> <username> <groupname>*

***#****gpasswd -a username groupname*

>**to add already existing user to group**

**#add multiple users to group**

#gpasswd -M mangesh,shubham dev

***Que.How to delete user from group?***

#gpasswd -d username groupname

***Que. How do you Assign Admin to group?***

#gpasswd -A username groupname

***Que.How do you Remove Admin from Group?***

#gpasswd -A ‘ ’ groupname

***Que. What is the user id of a root user ?***

-->By default **root user id is '0'**