

Linux Interview Questions

Lavatech Technology

2022

User and Group Administration

1. What is a user?

Ans. In Linux user is one who uses the system.

2. How many types of users available in Linux?

Ans. There are 5 types of users available in Linux.

- System user (Admin user who control the whole system nothing but root user).
- Normal user (Created by the Super user. In RHEL - 7 the user id's from 1000 - 60000).
- System user (Created when application or software installed)
- In RHEL - 7 the System users are Static system user id's from 1 - 200 and (ii) Dynamic system user user id's from 201 - 999).
- Network user (Nothing but remote user, ie., who are login to the system through network created)
- Windows Active Directory or in Linux LDAP or NIS).
- Sudo user (The normal users who are having admin or Super user privileges)

3. What is user management?

Ans. User management means managing user. ie., Creating the users, deleting the users and modifying the users.

4. What are the important points related to users?

- Ans. Users and groups are used to control access to files and resources.
- Users can login to the system by supplying username and passwords to the system.
- Every file on the system is owned by a user and associated with a group.
- Every process has an owner and group affiliation.
- Every user in the system is assigned a unique user id (uid) and group id (gid).
- User names and user id are stored in /etc/passwd file.
- User's passwords are stored in /etc/shadow file in an encrypted form.
- Users are assigned a home directory and a shell to work with the O/S.
- Users cannot read, write and execute each other's files without permission.
- Whenever a user is created a mail box is created automatically in /var/spool/mail location.
- And some user environmental files like .bash_logout, .bash_profile, .bashrc , ...etc., are also copied from /etc/skel to his/her home directory (/home/<username>).

5. What are fields available in /etc/passwd file?

Ans. <user name> : x : <uid> : <gid> : <comment> : <user's home directory> : <login shell (where 'x' means link to password file ie., /etc/shadow file)>

6. What are fields available in /etc/shadow file?

Ans. user name : password : last changed : min. days : max. days : warn days : inactive days : expiry days : reserved for future.

7. What are the files that are related to user management?

- **Ans./etc/passwd:** Stores user's information like user name, uid, home directory and shell ...etc.,
- **/etc/shadow:** Stores user's password in encrypted form and other information.
- **/etc/group:** Stores group's information like group name, gid and other information.
- **/etc/gshadow:** Stores group's password in encrypted form.
- **/etc/passwd:** Stores the /etc/passwd file backup copy.
- **/etc/shadow:** Stores the /etc/shadow file backup copy.
- **/etc/default/useradd:** Whenever the user created user's default settings taken from this file.
- **/etc/login.defs:** user's login defaults settings information taken from this file.
- **/etc/skel** —> Stores user's all environmental variables files and these are copied from this directory to user's home directory

8. In how many ways can we create the users?

- Ans. **useradd** - <options><user name>
- (ii) **adduser** - <options><user name>
- (iii) **newusers** <file name> (In this file we have to enter the user details same as /etc/passwd file)

9. **What is the syntax of useradd command with full options?**

Ans. **useradd** -u <uid> -g <gid> -G <secondary group> -c <comment> -d <home directory> -s <shell><user name>

Example: **useradd** -u 600 -g 600 -G java -c öracle userd /home/raju -s /bin/bash raju

10. **What is the syntax of adduser command with full options?** Ans.**adduser** -u <uid> -g <gid> -G <secondary group> -c <comment> -d <home directory> -s <shell><user name>

Example# **adduser** -u 700 -g 700 -G linux -c öracle userd /home/ram -s /bin/bash ram.

11. **What is the syntax of newuser command?**

- Ans.**newusers** <file name> (This command will create multiple users at a time)
- First we should a file and enter user's data as fields same as the fields of /etc/passwd file for how many users do you want to create and mention that file as an argument for newusers command.

- When we execute this command new users will be created but their environmental files like

bash_logout, bash_profile, bashrc and bash_history files will not be copied from /etc/skel. Directory. So, we have to copied manually from /etc/skel directory.

12. What is the syntax of userdel command with full options?

Ans. userdel <options><user name> The options are -f : forcefully delete the user even through the user is login. The user's home directory, mail and message directories are also deleted. -r : recursively means files in the user's home directory will be deleted and his home directory also deleted but the other files belongs to that user should be deleted manually.

13. How to check whether user is already created or not?

Ans. We can check in different ways. id <user name> (It shows the user id group id and user name if that is already created) grep <user name> /etc/passwd

14. How to verify or check the integrity of the password file?

- Ans. pwck <options> /etc/passwd or
- pwck <options> /etc/shadow

- The options are, -q :quiet r : read only s : sort the contents by uidin /etc/passwd and /etc/shadow files

15. How to verify or check the integrity of the group file?

- grpck <options> /etc/group or
- grpck <options> /etc/gshadow
- The options are, -r:read only -s:sort the contents by gidin /etc/group and /etc/gshadow files.
-