Linux Interview Questions

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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'sfrom 201 - 999).
   - Network user (Nothing but remote user, ie., who are login to the system trough 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/skell 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/skell** ——> 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 "oracle user" -d /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 "oracle user" -d /home/ram -s /bin/bash ram.