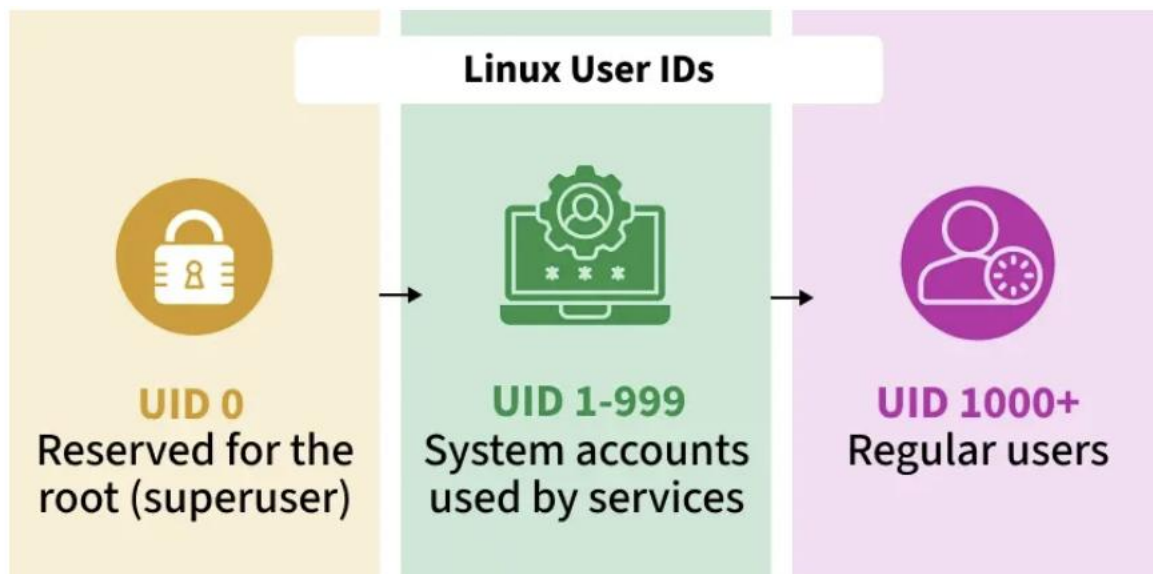




Linux supports multi-user environments, making it ideal for everything from personal laptops to large enterprise systems. Efficient user management:

- Secures the system from unauthorized access
- Ensures users can perform their roles without interfering with others
- Helps in auditing and tracking user activity



```
cbs@yourfullname:~$ id
uid=1000(cbs) gid=1000(cbs) groups=1000(cbs),4(adm),24(cdrom),27(sudo),30(dip),46(plugdev),101(lxd)
```

Linux uses groups to help you manage users, set permissions on those users. Normally, Linux computers have two user accounts

1. root account
2. normal users

User Account Files

- **/etc/passwd** This file contains the user account information for the system including:
 - Username
 - User ID (UID)
 - Primary Group ID (GID)
 - Home directory



- Default shell
- Full name of the user
- **/etc/shadow** This file contains encrypted passwords for the user account.
- **/etc/group** This file contains all groups in the system and user memberships:
 - Group name
 - Group ID (GID)
 - List of users in each group
- **/etc/gshadow** Each line in this file represents a record for a single group.

Creating and Managing Users and Groups

Tasks	Command	Example
Creating a User	<code>adduser username</code>	<code>adduser asma</code>
Deleting a User	<code>userdel -r username</code>	<code>userdel -r asma</code>
Creating a Group	<code>groupadd groupname</code>	<code>groupadd groupa</code>
Deleting a Group	<code>Groupdel groupname</code>	<code>groupdel groupa</code>

Add/Remove a User to/from a Group

Tasks	Command and Example
To add an existing user account to a group on you on your system.	Syntax: <code>sudo usermod -a -G groupname username</code> Example: <code>sudo usermod -a -G groupa asma</code>
To remove a user from a group.	Syntax: <code>sudo gpasswd -d username groupname</code> Example: <code>sudo usermod -a -G asma groupa</code>