



Linux Fundamentals

Lesson 7 User Management Essentials

Lesson Objectives

In this lesson, you will learn:

- Administrator commands like
 - Useradd
 - Userdel
 - Usermod
 - Groupadd
 - Groupdel etc.

Commands for User Management

Command	Description
useradd	Adds a new user account.
userdel	Deletes an user account.
usermod	Modifies an user account.
groupadd	Adds a new group.
groupmod	Modifies an existing group (for example, changes the GID or name).
groupdel	Deletes a group

useradd Command

The `useradd` command adds new user to the system. Command also includes various parameters related to the user.

Syntax:

- `$useradd [-c comment] [-d dir] [-e expire] [-g group] \ [-G group [, group...]] [-m] [-u uid] \ [-s shell] <loginname>`

The *login* parameter must be a unique string.

Username cannot comprise ALL or default keywords.

- Example: `$useradd myuser`
- Example: `$useradd -u 3000 -g other -d /home/bcalkins -m -s /bin/sh \ -c "Bill Calkins, ext. 2345" bcalkins`

useradd Command Options

Option	Description
-u <uid>	Sets the unique UID for the user.
-g <gid>	Specifies a predefined GID or name for the user that will be the user's primary group.
-G <gid>	Defines the new user's secondary group memberships. You can enter multiple groups, but they must be separated by commas.
-m	Creates a new home directory if one does not already exist
-s <shell>	Defines the full pathname for the shell program to be used as the user's login shell. The default is /bin/bash if a shell is not specified.
-c <comment>	Specifies the user's full name, location, and phone number, in a comment.
-d <dir>	Specifies the home directory of the new user
-e <expiration>	Sets an expiration date on the user account. Specifies the date on which the user can no longer log in and access the account. After the specified date, the account is locked. Use the following format to specify the date: mm/dd/yy.
<login-name>	Specifies the user login name to be assigned to this account.

Changing the Password

Passwd command is used to change password of an user. User can change his/her password if required.

- Ex: `$passwd`

Only the root user can change the password of other users. To change the password as root following command is used,

- Ex: `$passwd <username> # To Change the password of user from root`

Administrator can also delete the password using,

- `$passwd -d <username>`

Modifying User Accounts

usermod command is used to modify some of the parameters set with useradd.

Syntax:

- `$usermod [-u uid] [-g group] [-G group [, group...]] [-d dir [-m]] [-s shell] [-c comment] [-l new_name] [-e expire] <loginname>`

Ex: `$usermod -s /bin/bash oracle`

- Sets bash as login shell for the user oracle.

Deleting User Accounts from Command Line

userdel command is used to remove users from the system.

Ex: `$userdel [-r] <login-name>`

- `-r` removes the user's home directory from the local file system.

Example: `$userdel bcalkins`

- `$userdel -r usera`

Adding Group Accounts

groupadd command is used to create a new group in the system.

Syntax:

- `$groupadd <group-name>`

Ex:

- `$groupadd dba`
- `$groupadd -g 301 class1`

Modifying Group Accounts

groupmod command modifies the group details and makes appropriate changes in the database.

Syntax:

- `groupmod [-n <name>] <group-name>`

Ex:

- `groupmod -g 400 class1`

Deleting Group Accounts

groupdel command is used by the administrator to remove/delete a group.

User must be removed before removing his/her primary group.

Filesystem to be checked manually to ensure that no files are remaining owned by the deleted group. Groupdel will not do this for you.

Syntax:

- `$groupdel <group-name>`

Ex:

- `$groupdel dba`

User Information

All user account information except encrypted password is stored in `/etc/passwd`.

The fields in `/etc/passwd` are as follows:

- `username:password:UID:GID:comment:home_directory:login_shell`.

The `/etc/shadow` file contains the users' encrypted passwords and is very important to protect.

Summary

In this lesson you have learnt

- Administrator commands like
 - Useradd
 - Userdel
 - Usermod
 - Groupadd
 - Groupdel etc.

Review Questions

Question 1: List various administrator commands used to manage users and groups.

Question 2: _____ command is used to modify groups.