

2.8.5 Directory Management Facts

Navigating within and making changes to the directory structure are tasks you will frequently perform when using a Linux system.

This lesson covers the following topics:

- Navigate a Linux directory
- Create, copy, and move, a Linux directory
- Remove a Linux directory

Navigate a Linux Directory

The following table describes basic commands you use to navigate within a Linux directory.

Command	Description	Examples
pwd	Displays the current working directory.	<ul style="list-style-type: none">• If a user named Fred is currently in his home directory and types pwd at the shell prompt, /home/Fred is displayed.
cd	Changes the present working directory. <ul style="list-style-type: none">• cd .. changes to the parent directory.• cd ../.. changes two levels up in the directory.• cd / changes to the root directory.	<ul style="list-style-type: none">• cd directory1 changes to a directory named directory1 within the current working directory. (This is a <i>relative</i> path.)• cd /home/Fred/directory1 switches to directory1 in Fred's home directory, regardless of the current working directory. (This is an absolute path.)
ls	Displays the contents of a directory. Options include: <ul style="list-style-type: none">• -a displays all directory contents, including hidden content.• -l displays extended information, including the owner, modified date, size, and permissions.• -R displays the contents of a directory and all of	<ul style="list-style-type: none">• ls -al displays a long listing of all the contents in the current working directory, including hidden content.• ls -d displays only directories within the current directory.• ls -R /etc displays the contents of the /etc directory and all of its subdirectories.

its subdirectories.

- **-d** displays directories but not files.
- **-r** reverses the sort order.

Create, Copy, and Move a Linux Directory

The following table describes basic commands you use to manage a Linux directory:

Command	Description	Examples
mkdir	Creates a new directory. Use the -p option to create all directories within the specified path when that path does not already exist.	<ul style="list-style-type: none"> • mkdir work_files creates a directory named <i>work_files</i> in the current working directory. • mkdir /home/Fred/work_files creates a directory named <i>work_files</i> within the specified path.
cp	Copies directories. Copying leaves the source contents (directories and files) intact. Use the -r or -R option to recursively copy subdirectories and files within the directory.	<ul style="list-style-type: none"> • cp -r /temp /home/user copies the entire /temp directory (with all of its files, subdirectories, and files in the subdirectories) to the /home/user directory.
mv	<p>Moves or renames directories (and files). Moving directories removes the source directory and places it in the destination. Options include:</p> <ul style="list-style-type: none"> • -f overwrites a directory that already exist in the destination directory without prompting. • -i prompts before overwriting a directory in the destination directory. • -n never overwrites files in the destination directory. 	<ul style="list-style-type: none"> • mv /temp/station ~/doc/ moves station from the /temp directory to the ~/doc directory. • mv /current /previous renames the directory current to previous

Remove a Linux Directory

The following table describes basic commands you use to remove a Linux directory:

Command	Description	Examples
rmdir	Deletes an empty directory.	<ul style="list-style-type: none">• rmdir ~/Fred/work_files deletes the work_files directory if it is empty.
rm	<p>Removes the directory and file information from the file system, which makes the directories and files inaccessible. Options include:</p> <ul style="list-style-type: none">• -i prompts before removing.• -r removes directories, subdirectories, and files within them.• -f eliminates prompt for read-only files and avoids an exit code error if a file doesn't exist.	<ul style="list-style-type: none">• rm -rf /home/user/temp deletes the temp directory with all its subdirectories and files without prompting.• rm -r /home/user/* deletes all directories and files in the /home/user directory.

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