

Linux Basics

The ls command

The **ls** command is equivalent of the DOS **dir** command. It lists the files and subdirectories contained within the current directory. Some possible flags which can be used with the ls command are:

ls -a

Lists all files (Some configuration files starting with a dot '.' are otherwise not listed). Often the number of files in a directory is too large to be fitted within one screen of data. In such a case we use dir/p for DOS. For Linux a similar command is

ls | more

Lists files and directories page after page on keystroke. The above command actually is a combination of two commands. It introduces a new concept called 'Piping'. It is done using the logical OR or | character found just above the Enter key on your keyboard. In Linux it is possible to give the output of one command to another command as an input. The ls command lists files & subdirectories and the more command divides its input into page length views. Thus piping the ls output to more results in page length views of files and subdirectories.

ls -R

It lists the files and subdirectories of a directory and further lists the contents of each subdirectory recursively. The output of this command is usually large and is best seen when piped through more.

The pwd command

The pwd or the present working directory command gives you the path to the directory in which you presently are. It is used without flags simply as 'pwd'

The su command

If you have logged in as a normal user and might need to have root privileges to install a software or for some other small task; you could logout then login as root complete the work logout and login back as a normal user. Instead, you can just use the su command (it is equivalent to runas in Windows). The format is:

su username

Example: su root

When you 'su' to become root from a normal user, you are asked for the root password. But if you are root, you can use 'su' to become any user without using a password. Once your work is finished, use 'exit' to become yourself.

The whoami command

Sorry folks! This command won't solve your teenage identity crisis but it will tell you which user you are logged in as. Useful when you have used 'su' many times and now don't know who you are.

The cp command

This one copies files/directories from one place to another. Examples:

cp source_file_with_path destination_path

eg : cp /home/aarjav/news.txt /ftp/pub This would make news.txt public.

The cp command can be used with some useful flags also:

cp -i Interactive copying, prompts before overwriting files or directories

cp -l source_file_with_path destination_path Makes a link (shortcut) to the source_file at the destination_path instead of actually copying it there.

cp -p Preserve file attributes while copying if possible

cp -R Copy Recursively. Used when copying directories. This command also copies the contents of the subdirectories.

cp -u Update i.e. Copy only if the source file is newer than the destination file or the destination file does not exist.

The rm command

The rm command is used to remove or delete files or directories. Its general format is:

rm -flag file_or_directory_with_path

Example: rm /home/aarjav/waste.txt

Some flags which can be used with the rm command are

rm -v file.txt Remove verbosely, explain what is being done.

rm -r my_directory Remove the directory and its contents recursively.

The mkdir command

This command is used to create new a new directory. Its syntax is

mkdir -optional_flag directory_name

The possible flags are *mkdir -v directory_name*

Tell what is going on. *mkdir -p directory_with_path*

This is a cool command. Suppose you need a directory named SEIT within another directory called PVPP in /usr/local and the parent directory PVPP itself does not exist, then you can use :

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mkdir -p /usr/local/PVPP/SEIT
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This command creates the PVPP directory and the SEIT subdirectory in one go.

The man command

For someone new to Linux, the man command is one of the most important commands.

Example: **man command_name**

Suppose you have not understood fully one of the above commands or want to find out about a new command you have learnt, the man command provides a manual for that command.

Example: **man cp** will show you a manual on the cp command and so on.

This is it for now...after learning all of these commands you can proudly say that you are not a Linux rookie anymore. ;)