

DevOps(Day-2)

Linux



It is an operating system first released on September 17, 1991, by Linus Torvalds. It comes from the family of Unix operating system which is a black terminal screen that provides excellent security.

Basic Linux commands:-

1. Check your present working directory.

The command used to check the directory you are currently at is "**pwd**".

```
aws Services Search
[ec2-user@ip-172-31-55-67 linux]$ pwd
/home/ec2-user/linux
[ec2-user@ip-172-31-55-67 linux]$
```

List all the files or directories including hidden files.

"ls" - It is the command used to list the files in the present directory.

```
[ec2-user@ip-172-31-55-67 linux]$ ls
demo_file.txt  dir1  file1.txt
[ec2-user@ip-172-31-55-67 linux]$
```

There are multiple extensions that can be used along with ls command such as:-

-a :- It displays all the hidden files in the directory.

```
[ec2-user@ip-172-31-55-67 linux]$ ls -a
.  ..  demo_file.txt  dir1  file1.txt  .hiddenfile
[ec2-user@ip-172-31-55-67 linux]$
```

-l :- It gives a long listing of files.

```
[ec2-user@ip-172-31-55-67 linux]$ ls -l
total 0
-rw-rw-r-- 1 ec2-user ec2-user 0 Mar  8 16:42 demo_file.txt
drwxrwxr-x 2 ec2-user ec2-user 6 Mar  8 16:42 dir1
-rw-rw-r-- 1 ec2-user ec2-user 0 Mar  8 16:42 file1.txt
[ec2-user@ip-172-31-55-67 linux]$
```

-R :- gives a recursive listing, including the contents of all subdirectories and their subdirectories and so on.

```
[ec2-user@ip-172-31-55-67 linux]$ ls -R
.:
demo_file.txt  dir1  file1.txt

./dir1:
[ec2-user@ip-172-31-55-67 linux]$
```

-t :- lists the files in order of the time when they were last modified (newest first) rather than in alphabetical order.

```
[ec2-user@ip-172-31-55-67 linux]$ ls -t  
file1.txt  dir1  demo file.txt  
[ec2-user@ip-172-31-55-67 linux]$
```

-r :- lists the files in the reverse of the order.

```
[ec2-user@ip-172-31-55-67 linux]$ ls -r  
file1.txt  dir1  demo file.txt  
[ec2-user@ip-172-31-55-67 linux]$
```

-i :- displays all the files with their index numbers.

```
[ec2-user@ip-172-31-55-67 linux]$ ls -i  
13583619 demo file.txt      2354 dir1  13583620 file1.txt  
[ec2-user@ip-172-31-55-67 linux]$
```

1.

"ls *.sh":- It displays all the files ending with .sh present in the present directory.

```
[ec2-user@ip-172-31-55-67 linux]$ ls *.sh  
new1.sh new2.sh new3.sh  
[ec2-user@ip-172-31-55-67 linux]$
```

"ls -d */":- It displays all the directories in the directory you are currently at.

```
[ec2-user@ip-172-31-55-67 linux]$ ls -d */  
dir1/  dir2/  dir3/  
[ec2-user@ip-172-31-55-67 linux]$
```

2.

Commands to navigate and create directories.

"cd <path_of_the_directory>" :- This command navigates the user to the specified directory.

```
[ec2-user@ip-172-31-55-67 linux]$ cd dir2
[ec2-user@ip-172-31-55-67 dir2]$ pwd
/home/ec2-user/linux/dir2
[ec2-user@ip-172-31-55-67 dir2]$ █
```

"cd .." :- This command changes the directory to previous directory from the directory you are currently at.

```
[ec2-user@ip-172-31-55-67 dir2]$ cd ..
[ec2-user@ip-172-31-55-67 linux]$ pwd
/home/ec2-user/linux
[ec2-user@ip-172-31-55-67 linux]$ █
```

"cd ../../" :- This command changes the directory to two previous directories up from the directory you are currently at.

```
[ec2-user@ip-172-31-55-67 dir4]$ pwd
/home/ec2-user/linux/dir2/dir4
[ec2-user@ip-172-31-55-67 dir4]$ cd ../../
[ec2-user@ip-172-31-55-67 linux]$ pwd
/home/ec2-user/linux
[ec2-user@ip-172-31-55-67 linux]$ █
```

"cd -" :- This navigates to previous directory.

```
[ec2-user@ip-172-31-55-67 dir2]$ pwd
/home/ec2-user/linux/dir2
[ec2-user@ip-172-31-55-67 dir2]$ cd -
/home/ec2-user/linux
[ec2-user@ip-172-31-55-67 linux]$ █
```

"cd ~" :- This navigates to home directory.

```
[ec2-user@ip-172-31-55-67 linux]$ cd ~
[ec2-user@ip-172-31-55-67 ~]$ pwd
/home/ec2-user
[ec2-user@ip-172-31-55-67 ~]$ █
```

"cd 'Dir name with space' or cd Dir\ name\ with\ space" :- Slash or " is used for the directories with spaces.


```
[ec2-user@ip-172-31-55-67 dir2]$ ls
dir4  new dir 5
[ec2-user@ip-172-31-55-67 dir2]$ cd new\ dir\ 5
[ec2-user@ip-172-31-55-67 new dir 5]$ pwd
/home/ec2-user/linux/dir2/new dir 5
[ec2-user@ip-172-31-55-67 new dir 5]$
```

"**mkdir <desired_directory_name>**" :- This will create a directory.

```
[ec2-user@ip-172-31-55-67 new dir 5]$ mkdir dir6
[ec2-user@ip-172-31-55-67 new dir 5]$ ls
dir6
[ec2-user@ip-172-31-55-67 new dir 5]$
```

"**mkdir .<Newfolder>**" :- This will create a new hidden directory with name Newfolder.

```
[ec2-user@ip-172-31-55-67 new dir 5]$ mkdir .hiddenfolder
[ec2-user@ip-172-31-55-67 new dir 5]$ ls -a
.  ..  dir6  .hiddenfolder
[ec2-user@ip-172-31-55-67 new dir 5]$
```

"**mkdir A B C D E**" :- This will create multiple directories.

```
[ec2-user@ip-172-31-55-67 new dir 5]$ mkdir A B C D E
[ec2-user@ip-172-31-55-67 new dir 5]$ ls
A  B  C  D  dir6  E
[ec2-user@ip-172-31-55-67 new dir 5]$
```

"**mkdir -p A/B/C/D/E**" :- This will create nested directories.

```
[ec2-user@ip-172-31-55-67 new dir 5]$ mkdir -p A/B/C/D/E
[ec2-user@ip-172-31-55-67 new dir 5]$ cd A/B/C/D/E
[ec2-user@ip-172-31-55-67 E]$ pwd
/home/ec2-user/linux/dir2/new dir 5/A/B/C/D/E
[ec2-user@ip-172-31-55-67 E]$
```

"**rmdir <dir_name>**" :- This will delete the directory.

```

[AWS Console Home -31-55-67 new dir 5]$ ls
A B C D dir6 E
[ec2-user@ip-172-31-55-67 new dir 5]$ rmdir B
[ec2-user@ip-172-31-55-67 new dir 5]$ ls
A C D dir6 E
[ec2-user@ip-172-31-55-67 new dir 5]$ 

```

"rm -r <dir_name>" :- This will delete all the files and directories inside dir_name directory recursively.

```

[ec2-user@ip-172-31-55-67 new dir 5]$ ls
A C D dir6 E
[ec2-user@ip-172-31-55-67 new dir 5]$ rm -r A
[ec2-user@ip-172-31-55-67 new dir 5]$ ls
C D dir6 E
[ec2-user@ip-172-31-55-67 new dir 5]$ 

```

"mkdir -m 700 <newdir>" :- This will set the permission while creating the directory.

```

[ec2-user@ip-172-31-55-67 new dir 5]$ mkdir -m 700 newdir
[ec2-user@ip-172-31-55-67 new dir 5]$ ls -ltr
total 0
drwxrwxr-x 2 ec2-user ec2-user 6 Mar  8 17:01 dir6
drwxrwxr-x 2 ec2-user ec2-user 6 Mar  8 17:02 E
drwxrwxr-x 2 ec2-user ec2-user 6 Mar  8 17:02 D
drwxrwxr-x 2 ec2-user ec2-user 6 Mar  8 17:02 C
drwx----- 2 ec2-user ec2-user 6 Mar  8 17:11 newdir
[ec2-user@ip-172-31-55-67 new dir 5]$ 

```

WRITTEN BY

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