



Linux

Introduction to File Handling Commands in Linux

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Introduction to File Handling Commands in Linux

In this presentation, we'll explore the fundamental commands for file handling in Linux. Understanding these commands is essential for efficient navigation of Linux systems and can make your work more productive.

cat

The `cat` command displays the contents of one or more files and can also concatenate files to create new ones. It's a versatile command that can simplify the file handling process.

SYNTAX: `cat filename`

```
vnr@vnrvjiet01:~$ cat > vnr  
hello freshers  
welcome to vnrvjiet  
vnr@vnrvjiet01:~$ cat vnr  
hello freshers  
welcome to vnrvjiet
```

```
zifanpc: ~  
zifanpc@zifanpc:~$ ls -la  
total 120  
drwxr-xr-x 12 zifanpc zifanpc 4096 Nov 11 14:24 .  
drwxr-xr-x  3 root    root     4096 Nov 11 14:24 ..  
-rw-r--r--  1 zifanpc zifanpc  125 Nov 11 14:24 .bash_history  
-rw-r--r--  1 zifanpc zifanpc  176 Nov 11 14:24 .bashrc  
-rw-r--r--  1 zifanpc zifanpc  125 Nov 11 14:24 .dmrc  
drwxr-xr-x  2 zifanpc zifanpc  4096 Nov 11 14:24 examples.desktop  
drwxr-xr-x  2 zifanpc zifanpc  4096 Nov 11 14:24 .ICEauthority  
-rw-r--r--  1 zifanpc zifanpc  125 Nov 11 14:24 .isomaster  
-rw-r--r--  1 zifanpc zifanpc  125 Nov 11 14:24 .mtab.fuse  
zifanpc@zifanpc:~$ gnome-screenshot
```

ls

The `ls` command lists the files and directories in the current directory. With its various flags, you can tailor the output to your specific needs.

SYNTAX: ls

```
vnr@vnrvjiet01:~$ ls -l
total 8
-rw-r--r-- 1 vnr vnr 33 Sep 15 05:20 aids
-rw-r--r-- 1 vnr vnr 35 Sep 15 05:24 vnr
```

mkdir

Use the `mkdir` command to create new directories. Save time when working on complex projects or organizing your files by using logical and consistent naming conventions

SYNTAX: `mkdir -r directory`

```
vnr@vnrvjiet01:~$ mkdir aas  
vnr@vnrvjiet01:~$ ls  
aas  aids  vnr
```




rm

The `rm` command is used to delete files and directories. Use it with caution and double-check the pathname to avoid any critical data loss. For deleting directories, the `-r` flag is required to prevent accidental deletion.

SYNTAX: `rm filename`

```
vnr@vnrvjiet01:~$ rm vnr  
vnr@vnrvjiet01:~$ rm -r aas  
vnr@vnrvjiet01:~$ ls  
aids
```

```
example anastasialanz$ ls
index.html
example anastasialanz$ cp hello.txt hello-copy.txt
example anastasialanz$ ls
hello.txt      index.html
example anastasialanz$
```

cp

Use the `cp` command to copy files or directories from one location to another. This is useful when you want to create a backup or create a duplicate copy of a file for testing or experimentation.

SYNTAX: cp source_file destination_file

```
vnr@vnrvjiet01:~$ cp aids vnr  
vnr@vnrvjiet01:~$ ls  
aids  vnr
```

mv

Use the `mv` command to move or rename files and directories. This can be useful when you want to reorganize your files, change the name of a file, or move it to a different location.

SYNTAX: `mv original_name new_name`


```
vnr@vnrvjiet01:~$ mv vnr vjiet  
vnr@vnrvjiet01:~$ ls  
aids  vjiet
```

stat

The `stat` command provides detailed information about a file, including timestamps, permissions, and more. This can be useful when troubleshooting a problem with a file or checking the status of a file.

SYNTAX: stat filename

```
fa.wikipedia.org
g (208.80.152.2) 56(84) bytes of data.

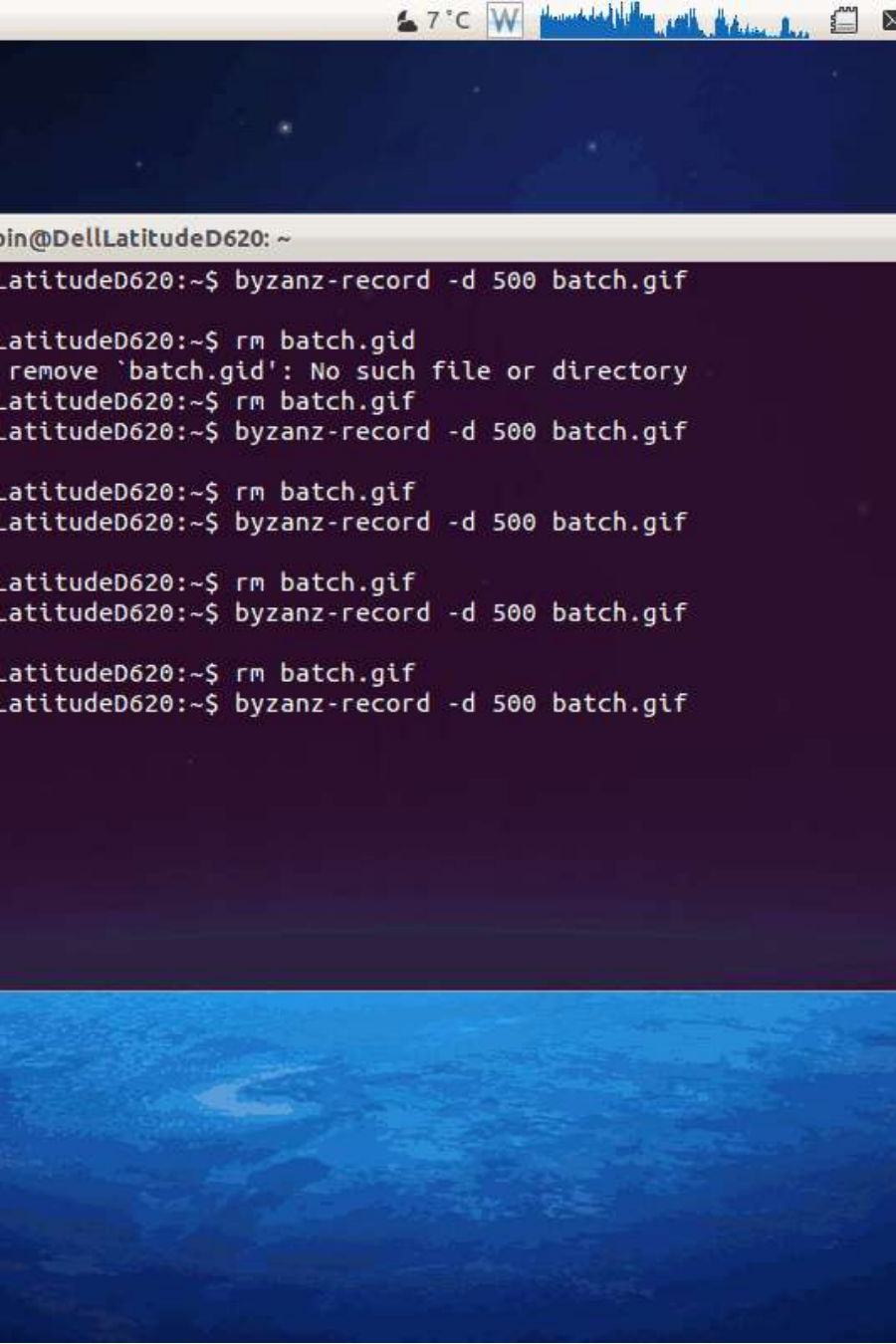
ping statistics ---
Received, 0% packet loss, time 0ms
28/540.528/540.528/0.000 ms

6 Jul 30 22:43 .
6 Sep 14 20:42 ..
6 May 14 00:15 account
6 Jul 31 22:26 cache
6 May 18 16:03 db
6 May 18 16:03 empty
6 May 18 16:03 games
6 Jun  2 18:39 gdm
6 May 18 16:03 lib
6 May 18 16:03 local
6 May 14 00:12 lock -> ../run/lock
6 Sep 14 20:42 log
6 Jul 30 22:43 mail -> spool/mail
6 May 18 16:03 nis
6 May 18 16:03 opt
6 May 18 16:03 preserve
6 Jul  1 22:11 report
6 May 14 00:12 run -> ../run
6 May 18 16:03 spool
6 Sep 12 23:50 tmp
6 May 18 16:03 yp
arch wiki
resto, refresh-packagekit, remove-with-leaves
ry_db
```

73% [=====

```
vnr@vnrvjiet01:~$ stat aids
```

```
File: aids
Size: 33          Blocks: 8          IO Block: 4096   regular file
Device: 810h/2064d Inode: 29399       Links: 1
Access: (0644/-rw-r--r--)  Uid: ( 1000/   vnr)   Gid: ( 1000/   vnr)
Access: 2023-09-15 05:28:36.627976706 +0530
Modify: 2023-09-15 05:20:54.277973906 +0530
Change: 2023-09-15 05:20:54.277973906 +0530
Birth: 2023-09-15 05:20:39.407973816 +0530
```

file

The `file` command determines the type of a file, such as text, binary, or specific file formats. Knowing the file type can be useful when you need to work with a particular type of file or troubleshoot issues with file compatibility.

SYNTAX: `file filename`

```
vnr@vnrvjiet01:~$ file aids  
aids: ASCII text
```

diff

The `diff` command is used to compare the contents of two files and display the differences. This is useful when you want to check for changes or modifications between files.

SYNTAX: `diff filename1 filename2`

```
vnr@vnrvjiet01:~$ diff aids num
1,2c1,13
< hey welcome
< to linux programming
---
> 1
> 2
> 3
> 3
> 3
> 4
> 5
> 6
> 7
> 8
> 9
> 0
> 11
```

```
tail
command "tail" does not accept any input

CN:16 SD:9 DL:3.9MiB ETA:26m17s]
CN:16 SD:9 DL:3.8MiB ETA:26m59s]
CN:16 SD:9 DL:3.8MiB ETA:26m46s]
CN:20 SD:9 DL:3.8MiB ETA:26m38s]
CN:20 SD:9 DL:3.8MiB ETA:26m29s]
CN:19 SD:9 DL:3.9MiB ETA:26m12s]
CN:19 SD:9 DL:3.9MiB ETA:25m47s]
CN:17 SD:9 DL:3.9MiB ETA:25m52s]
CN:17 SD:9 DL:3.8MiB ETA:26m30s]
CN:17 SD:9 DL:3.8MiB ETA:26m48s]
CN:17 SD:9 DL:3.8MiB ETA:26m49s]
CN:17 SD:9 DL:3.7MiB ETA:27m8s]
CN:17 SD:9 DL:3.7MiB ETA:27m40s]
CN:17 SD:9 DL:3.6MiB ETA:28m19s]
CN:22 SD:9 DL:3.5MiB ETA:29m11s]
CN:20 SD:9 DL:3.3MiB ETA:30m14s]
CN:19 SD:9 DL:3.3MiB ETA:30m32s]
CN:19 SD:9 DL:3.4MiB ETA:29m57s]
CN:19 SD:9 DL:3.5MiB ETA:29m7s]
CN:19 SD:9 DL:3.6MiB ETA:28m3s]
CN:19 SD:9 DL:3.7MiB ETA:26m59s]
CN:19 SD:9 DL:3.9MiB ETA:25m55s]
CN:19 SD:9 DL:4.1MiB ETA:24m21s]
CN:19 SD:9 DL:4.4MiB ETA:23m3s]
CN:19 SD:9 DL:4.6MiB ETA:21m59s]
CN:16 SD:9 DL:4.9MiB ETA:20m46s]
CN:16 SD:9 DL:4.9MiB ETA:20m30s]
CN:16 SD:9 DL:5.2MiB ETA:19m30s]
CN:16 SD:9 DL:5.2MiB ETA:19m22s]
CN:16 SD:9 DL:5.1MiB ETA:19m39s]
CN:16 SD:9 DL:5.0MiB ETA:20m9s]
CN:16 SD:9 DL:4.8MiB ETA:20m53s]
CN:16 SD:9 DL:4.6MiB ETA:21m45s]
CN:16 SD:9 DL:4.3MiB ETA:23m7s]
CN:16 SD:9 DL:4.2MiB ETA:23m38s]
CN:18 SD:9 DL:4.0MiB ETA:24m46s]
CN:13 SD:9 DL:3.8MiB ETA:25m55s]
CN:11 SD:9 DL:3.6MiB ETA:27m41s]
CN:11 SD:9 DL:3.4MiB ETA:29m13s]
CN:11 SD:9 DL:3.3MiB ETA:30m6s]
CN:11 SD:9 DL:3.2MiB ETA:31m10s]
CN:11 SD:9 DL:3.1MiB ETA:31m58s]
CN:11 SD:9 DL:3.0MiB ETA:33m1s]
CN:11 SD:9 DL:2.8MiB ETA:34m50s]
CN:11 SD:9 DL:2.7MiB ETA:36m38s]
CN:11 SD:9 DL:2.6MiB ETA:37m43s]
CN:16 SD:9 DL:2.5MiB ETA:39m10s]
CN:16 SD:9 DL:2.5MiB ETA:39m46s]
CN:16 SD:9 DL:2.4MiB ETA:41m47s]
CN:16 SD:9 DL:2.2MiB ETA:43m48s]
CN:16 SD:9 DL:2.1MiB ETA:45m41s]
ry as of Wed Apr 15 06:43:22 2020 ***
=====
CN:16 SD:9 DL:2.0MiB ETA:48m19s]
AW Technical Suite 2019 (21.3.0.755)/CONTENT/CoreIDRAWTechnicalSuite2019Extras-Fills.zip (11more)
-----
```

head and tail

The `head` and `tail` commands are used to view the beginning or end of a file, respectively. Use them when you want to quickly view the contents of a file without opening it or when you need to check the end or beginning of a file for specific information.

SYNTAX: head filename/tail filename

head and tail

The `head` and `tail` commands are used to view the beginning or end of a file, respectively. Use them when you want to quickly view the contents of a file without opening it or when you need to check the end or beginning of a file for specific information.

SYNTAX: head filename/tail filename

```
vnr@vnrvjiet01:~$ head num
```

```
1
```

```
2
```

```
3
```

```
3
```

```
3
```

```
4
```

```
5
```

```
6
```

```
7
```

```
8
```

```
vnr@vnrvjiet01:~$ tail num
```

```
3
```

```
3
```

```
4
```

```
5
```

```
6
```

```
7
```

```
8
```

```
9
```

```
0
```

```
11
```

Conclusion

The file handling commands discussed in this presentation are essential for working efficiently with Linux systems. Learning these commands can save time, reduce the risk of data loss, and improve your productivity.

Questions and Discussion

It's time to open the floor for questions and discussions regarding file handling commands in Linux. Don't hesitate to ask questions or offer your own insights into these commands.

Thank You

Thank you for attending this presentation on essential Linux commands for file handling. Happy Linuxing!