

Tar (Tape Archive)

Tar - Tape Archive

The tar command in linux is used to archive (compress) and extract the archived files.

- c = This creates an archive file.
- x = Extracts the archive file.
- f = Specifies filename of Archive files
- v = Prints verbose information for any tar operation on the terminal.
- t = Lists all files inside an archive file.
- u = Archives a file and then adds it to an existing archive file.
- r = Updates a file or directory located inside a .tar file.
- z = Creates a tar file using gzip compression.
- j = Create an archive file using the bzip2 compression.
- w = Verifies an archive file.

[root@ip-172-31-86-29 ~]# wget http://git.kernel.org/torvalds/linux-6.11-rc5.tar.gz

linux-6.11-rc5.tar.gz

[root@ip-172-31-86-29 ~]# ls

linux-6.11-rc5.tar.gz

[root@ip-172-31-86-29 ~]# touch movie1 movie2 movie3

[root@ip-172-31-86-29 ~]# ls

linux-5.tar.gz movie1 movie2 movie3

[root@ip-172-31-86-29 ~]# tar -cvf movie.tar movie1 movie2 movie3

movie1
movie2
movie3 } → it is display because of "v"

[root@ip-172-31-86-29 ~]# ls -l

```
..          linux-
-rw-r--r--  --      0      movie1
- - - - -      0      movie2
- - - - -      0      movie3
-rw-r--r--  ..      10240   movie.tar
```

still size is very big, after compression also.

[root@ip-172-31-86-29 ~]# tar -tvf movie.tar

```
-rw-r--r--  --      0  --  movie1
- - - - -      0  --  movie2
- - - - -      0  --  movie3
```

[∴ to check what all in
"movie.tar"
t-lst]

[root@ip-172-31-86-29 ~]# ls

linux- movie.tar movie1 movie2 ~~movie3~~

[root@ip-172-31-86-29 ~]# rm movie1 movie2

yes
yes

root@ip-172-31-86-29 ~# ls

linux tar.gz movies movieall

root@ip-172-31-86-29 ~# tar -xvf movieall

movie1

movie2

movie3

root@ip-172-31-86-29 ~# ls

linux tar.gz movie1 movie2 movie3 movieall

root@ip-172-31-86-29 ~# ls -l movieall

rw-r--r-- 1 root root 4096 2020-08-29 10:40 movieall

root@ip-172-31-86-29 ~#

[∴ x - extract

v - print

f - file]

[∴ if we run this command,
will give all the files in
"movieall"]

[∴ "movie3" is overwritten]

[∴ As we have seen earlier, the
value is higher]

To compress and extract in gzip format:

* tar -czvf filename.tar.gz filenames

* tar -czvf filename.tar.gz foldername

* tar -xzf filename.tar.gz

root@ip-172-31-86-29 ~# mkdir marvel

root@ip-172-31-86-29 ~# cd marvel

root@ip-172-31-86-29 marvel~# touch avengers deadpool ironman

root@ip-172-31-86-29 marvel~# ls

avengers deadpool ironman

root@ip-172-31-86-29 marvel~# cd ..

Twitter-172-31-86-29 ~J# 15 -l

total 2..

```
..      /linux.gz
..      (53)      marvel
..      0         movies
..      0         movie2
..      0         movie3
..      10240     moviecoll
```

Twitter-172-31-86-29 ~J# tar -cvf marvels.tar marvel

marvel/

marvel/avengers

marvel/deadpool

marvel/thorman

Twitter-172-31-86-29 ~J# 15 -l

total

```
..      1      ..      /linux.gz
..      53      marvel
..      (10240)  marvels.tar
..      0       movie1
..      0       movie2
..      0       movie3
..      10240   moviecoll
```

Twitter-172-31-86-29 ~J# cd marvel

Twitter-172-31-86-29 marvelJ# tm *

```
..      'avengers'  yes
..      'deadpool'  yes
..      'thorman'   yes
```

Twitter-172-31-86-29 marvelJ# 15

Twitter-172-31-86-29 marvelJ# cd ..

Twitter-172-31-86-29 ~J# 15 -l marvel

```
..      6      ..      marvel
```

Twitter-172-31-86-29 ~J# tmdir marvel

Twitter-172-31-86-29 ~J# 15

```
linux.gz  marvels.tar  movie1  movie2  movie3  moviecoll
```

root@ip-172-31-86-29 ~# tar -xvf marvels.tar

marvel/

marvel/avengers

marvel/deadpool

marvel/ironman

root@ip-172-31-86-29 ~# ls

linux.. gz marvel marvels.tar movie1 movie2 movie3 moviecoll

root@ip-172-31-86-29 ~# ls -l

total ..

..	2..	linux.gz
..	53	marvel
..	10240	marvels.tar
..	0	movie1
..	0	movie2
..	0	movie3
..	10240	moviecoll

root@ip-172-31-86-29 ~# cd marvel

root@ip-172-31-86-29 ~# ls

avengers deadpool ironman

root@ip-172-31-86-29 ~# cd ..

root@ip-172-31-86-29 ~# ls -l marvels.tar

.. 10240 marvels.tar

[∴ we created "marvels.tar" and deleted the folder "marvel" and then "extracted" the "marvels.tar" and got the "marvel" folder and the files inside that]

[∴ But one thing is our "marvels.tar" file size is so big]

root@ip-172-31-86-29 ~# tar -czvf marvels1.tar.gz marvels.tar

marvels.tar

root@ip-172-31-86-29 ~# ls -l

..	linux.gz
53	marvel
<u>45</u>	marvels.tar
168	marvels.tar.gz
0	movie1
0	movie2
0	movie3
10240	moviecoll

[∴ finally "marvels.tar" file size got smaller]