

TAR EJEMPLOS

1. Empaquetar
2. Empaquetar comprimiendo (ratios de compresión con xz, gzip, bzip)
3. Visualizar el contenido
4. Extraer el contenido
5. Extraer el contenido en otro directorio
6. Extraer el contenido de manera parcial (solo un fichero)
7. Creación de copias incrementales

1]

```
[ root@localhost home] # tar cvf curso01-00.tar curso/

(...)

root@localhost home] # ls -lh

total 181M

drwx-----. 16 curso curso 4,0K nov 23 01:17 curso
-rw-r--r--   1 root  root  181M nov 25 10:32 curso01-00.tar
drwx-----.  2 root  root   16K oct 30 11:26 lost+found
```

2]

```
[ root@localhost home] # tar cJvf curso01-00.tar.xz curso/

(...)

[ root@localhost home] # ls -lh

total 247M

drwx-----. 16 curso curso 4,0K nov 23 01:17 curso
-rw-r--r--   1 root  root  181M nov 25 10:36 curso01-00.tar
-rw-r--r--   1 root  root   66M nov 25 10:35 curso01-00.tar.xz
drwx-----.  2 root  root   16K oct 30 11:26 lost+found

[ root@localhost home] # tar czvf curso01-00.tar.gz curso/

(...)

[ root@localhost home] # ls -lh
```

```
total 329M
```

```
drwx-----. 16 curso curso 4,0K nov 23 01:17 curso
```

```
-rw-r--r-- 1 root root 181M nov 25 10:36 curso01-00.tar
```

```
-rw-r--r-- 1 root root 82M nov 25 10:38 curso01-00.tar.gz
```

```
-rw-r--r-- 1 root root 66M nov 25 10:35 curso01-00.tar.xz
```

```
drwx-----. 2 root root 16K oct 30 11:26 lost+found
```

```
[root@localhost home]# tar czvf curso01-00.tar.gz curso/
```

```
[root@localhost home]# ls -lh
```

```
total 404M
```

```
drwx-----. 16 curso curso 4,0K nov 23 01:17 curso
```

```
-rw-r--r-- 1 root root 181M nov 25 10:36 curso01-00.tar
```

```
-rw-r--r-- 1 root root 75M nov 25 10:39 curso01-00.tar.bz2
```

```
-rw-r--r-- 1 root root 82M nov 25 10:38 curso01-00.tar.gz
```

```
-rw-r--r-- 1 root root 66M nov 25 10:35 curso01-00.tar.xz
```

```
drwx-----. 2 root root 16K oct 30 11:26 lost+found
```

```
3]
```

```
[root@localhost home]# tar tvf curso01-00.tar | more
```

```
drwx----- curso/curso 0 2022-11-23 01:17 curso/
```

```
drwxr-xr-x curso/curso 0 2022-10-30 13:38 curso/Imágenes/
```

```
drwxr-xr-x curso/curso 0 2022-11-25 10:21 curso/Descargas/
```

```
-rw-r--r-- curso/curso 20598883 2022-11-19 18:19
```

```
curso/Descargas/hplip-3.22.10-RHEL9-x86_64.rpm
```

```
drwx----- curso/curso 0 2022-10-30 13:38 curso/.local/
```

```
drwx----- curso/curso 0 2022-11-19 18:19 curso/.local/share/
```

```
drwx----- curso/curso 0 2022-11-22 23:52
```

```
curso/.local/share/keyrings/
```

```
-rw----- curso/curso 207 2022-10-30 13:38
```

```
curso/.local/share/keyrings/user.keystore
```

```
(...)
```

4]

```
[ root@localhost home] # \rm -r curso
```

```
[ root@localhost home] # ls
```

```
curso01-00.tar  curso01-00.tar.bz  curso01-00.tar.gz  curso01-00.tar.xz  lost+found
```

```
[ root@localhost home] # tar xf curso01-00.tar
```

```
[ root@localhost home] # ls -l
```

```
total 412720
```

```
drwx----- 16 curso curso      4096 nov 23 01:17 curso
-rw-r--r--  1 root  root  189644800 nov 25 10:36 curso01-00.tar
-rw-r--r--  1 root  root   78422954 nov 25 10:39 curso01-00.tar.bz
-rw-r--r--  1 root  root   85413635 nov 25 10:38 curso01-00.tar.gz
-rw-r--r--  1 root  root   69118368 nov 25 10:35 curso01-00.tar.xz
drwx-----. 2 root  root    16384 oct 30 11:26 lost+found
```

5]

```
[ root@localhost home] # mkdir extraer
```

```
[ root@localhost home] # tar xvf curso01-00.tar -C extraer/
```

```
(...)
```

```
[ root@localhost home] # ls -l extraer/
```

```
total 4
```

```
drwx----- 16 curso curso 4096 nov 23 01:17 curso
```

6]

```
[ root@localhost home] # mkdir restaura && cd restaura
```

```
[ root@localhost restaura] # tar tvf ../curso01-00.tar | grep pdf
```

```
-rw-r--r-- curso/curso  228533 2005-12-30 16:56 curso/bash-5.2/doc/rose94.pdf
```

```
-rw-r--r-- curso/curso  393895 2016-08-19 17:40 curso/bash-5.2/doc/aosa-bash-full.pdf
```

```
-rw-r--r-- curso/curso  795771 2022-09-19 18:02 curso/bash-5.2/doc/bashref.pdf
```

```

-rw-r--r-- curso/curso      49482 2013-11-20 13:51 curso/bash-
5.2/doc/article.pdf

-rw-r--r-- curso/curso      228239 2014-07-21 18:04 curso/bash-
5.2/doc/aosa-bash.pdf

-rw-r--r-- curso/curso      401989 2022-09-19 18:02 curso/bash-
5.2/doc/bash.pdf

[root@localhost restaura] # tar xvf ../curso01-00.tar curso/bash-
5.2/doc/rose94.pdf

curso/bash-5.2/doc/rose94.pdf

[root@localhost restaura] # ls -R

.:

curso

./curso:

bash-5.2

./curso/bash-5.2:

doc

./curso/bash-5.2/doc:

rose94.pdf

```

7] Preparación escenario

```

[root@localhost home] # rm curso01-00.ta*

[root@localhost home] # mkdir test

[root@localhost home] # for i in {1..6}

> do

> echo "$i">> test/$i

> done

[root@localhost home] # ls test

1  2  3  4  5  6

```

```
[ root@localhost home] # mkdir bkp && cd bkp
```

Fin de la preparación escenario

```
[ root@localhost bkp] # tar cvf lunes.tar -g lunes.snap ../test
```

```
tar: ../test: El directorio es nuevo
```

```
tar: Eliminando la `../' inicial de los nombres
```

```
../test/
```

```
../test/1
```

```
../test/2
```

```
../test/3
```

```
../test/4
```

```
../test/5
```

```
../test/6
```

```
[ root@localhost bkp] # ls
```

```
lunes.snap  lunes.tar
```

```
[ root@localhost bkp] # echo "masInfo" >> ../test/1
```

```
[ root@localhost bkp] # tar cvf martes.tar -g lunes.snap ../test
```

```
tar: Eliminando la `../' inicial de los nombres
```

```
../test/
```

```
../test/1
```

```
[ root@localhost bkp] # ls
```

```
lunes.snap  lunes.tar  martes.tar
```

```
[ root@localhost bkp] # echo "masInfo" >> ../test/5
```

```
[ root@localhost bkp] # tar cvf miercoles.tar -g lunes.snap ../test
```

```
tar: Eliminando la `../' inicial de los nombres
```

```
../test/
```

```
../test/5
```

CPIO EJEMPLOS

1. Crear fichero cpio (backup)
2. Comprimir cpio. Crear cpio comprimido.
3. Mostrar contenido de cpio
4. Extraer cpio

1] Preparación escenario

```
[ root@localhost bkp] # rm *
```

Fin preparación. Continúa ejercicio anterior

```
[ root@localhost bkp] # find ../test -type f | cpio -ov > test.cpio
```

```
../test/5
```

```
../test/2
```

```
../test/3
```

```
../test/4
```

```
../test/1
```

```
../test/6
```

```
1 bloque
```

```
[ root@localhost bkp] # ls
```

```
test.cpio
```

2]

```
[ root@localhost bkp] # find ../test -type f | cpio -ov |gzip >
test.cpio.gz
```

```
../test/5
```

```
../test/2
```

```
../test/3
```

```
../test/4
```

```
../test/1
```

```
../test/6
```

```
1 bloque
```

```
[ root@localhost bkp] # ls
```

```
test.cpio test.cpio.gz
```

```
[ root@localhost bkp] # mkdir ../test/dir1 && echo  
"data" > ../test/dir1/fichero1
```

```
[ root@localhost bkp] # find ../test -type f | cpio -ov |bzip2 >  
test.cpio.bz2
```

```
../test/5
```

```
../test/2
```

```
../test/3
```

```
../test/4
```

```
../test/1
```

```
../test/dir1/fichero1
```

```
../test/6
```

```
1 bloque
```

```
3]
```

```
[ root@localhost bkp] # cpio -it < test.cpio
```

```
../test/5
```

```
../test/2
```

```
../test/3
```

```
../test/4
```

```
../test/1
```

```
../test/6
```

```
1 bloque
```

```
[ root@localhost bkp] # bzcat test.cpio.bz2 | cpio -it
```

```
../test/5
```

```
../test/2
```

```
../test/3
```

```
../test/4
```

```
../test/1
```

```
../test/dir1/fichero1
```

```
../test/6
```

1 bloque

4]

```
[ root@localhost bkp] # \rm -r ../test
```

```
[ root@localhost bkp] # ls ..
```

bk bkp curso lost+found

```
[ root@localhost bkp] # cpio -ivd < test.cpio
```

../test/5

../test/2

../test/3

../test/4

../test/1

../test/6

1 bloque

```
[ root@localhost bkp] # ls ..
```

bk bkp curso lost+found test

```
[ root@localhost bkp] # bzip test.cpio.bz2 | cpio -iuvd
```

../test/5

../test/2

../test/3

../test/4

../test/1

../test/dir1/fichier01

../test/6

1 bloque

```
[ root@localhost bkp] # ls ../test
```

1 2 3 4 5 6 dir1

DD EJEMPLOS

1. Backup
2. Montaje y acceso

```
1)[ root@localhost bkp] # lsblk -f

NAME      FSTYPE  FSVER          LABEL          UUID
FSAVAIL  FSUSE%  MOUNTPOINTS

sda

└─sda1 vfat      FAT16          1339-94C9
392,8M    2% /boot/efi

└─sda2 ext4       1.0            b0a7a312-00bd-43e3-
a614-b09fff39a5da    1,5G    72% /

└─sda3 ext4       1.0            61bb572b-39b9-4028-
b319-30eb1f009d3b    5,1G    7% /var

└─sda4 ext4       1.0            6eb06ad2-b2aa-4c3d-
ba2a-ccf46118b035    1,6G    9% /home

└─sda5 swap       1            3dfab3be-cd51-4a4b-
817c-a27784cff390          [ SWAP]

sr0      iso9660 Joliet Extension VBOX_GAs_7.0.0 2022-10-06-17-50-34-86

[ root@localhost bkp] # dd if=/dev/sda4 of=/var/home.iso bs=1024
status=progress

2073232384 bytes (2,1 GB, 1,9 GiB) copied, 52 s, 39,9 MB/s

2097152+0 registros leídos

2097152+0 registros escritos

2147483648 bytes (2,1 GB, 2,0 GiB) copied, 52,6436 s, 40,8 MB/s

[ root@localhost bkp] # ls -l /var/home.iso

-rw-r--r-- 1 root root 2147483648 nov 25 12:28 /var/home.iso

[ root@localhost bkp] # file /var/home.iso

/var/home.iso: Linux rev 1.0 ext4 filesystem data, UUID=6eb06ad2-b2aa-
4c3d-ba2a-ccf46118b035 (needs journal recovery) (extents) (64bit)
(large files) (huge files)

2)[ root@localhost bkp] # mount /var/home.iso /mnt/

[ root@localhost bkp] # mount /var/home.iso /mnt/

[ root@localhost bkp] # ls /mnt/
```

```
bk bkp curso lost+found test
```

ZIP EJEMPLO

```
[ root@localhost home] # zip bkp.zip bkp/
  adding: bkp/ (stored 0%)
[ root@localhost home] # zip bkp.zip bkp/*
  adding: bkp/test02.cpio (deflated 69%)
  adding: bkp/test.cpio (deflated 76%)
  adding: bkp/test.cpio.bz2 (stored 0%)
  adding: bkp/test.cpio.gz (stored 0%)
[ root@localhost home] # ls
bk bkp bkp.zip curso lost+found test
[ root@localhost home] # touch bkp/nuevofichero
[ root@localhost home] # zip bkp.zip -u bkp/*
  adding: bkp/nuevofichero (stored 0%)
[ root@localhost home] # \rm -r bkp
[ root@localhost home] # ls
bk bkp.zip curso lost+found test
[ root@localhost home] # unzip bkp.zip
Archive:  bkp.zip
  creating: bkp/
  inflating: bkp/test02.cpio
  inflating: bkp/test.cpio
  extracting: bkp/test.cpio.bz2
  extracting: bkp/test.cpio.gz
  extracting: bkp/nuevofichero
[ root@localhost home] # ls
bk bkp bkp.zip curso lost+found test
```


