tar Archive files

CONCEPTS

Exactly one mode letter is needed: c create, x extract, t list. -f <file> names the archive and must be followed by it.

Files on disk
↓ tar -c
Archive .tar
↓ -z / -j / -J
Compressed .tar.gz .bz2 .xz
↓ tar -x
Files restored

Reading an archive, GNU tar detects the compression itself, so -xf works for .gz, .bz2 and .xz alike.

CREATE

tar -cf *<out.tar>* *<path>*...
Create an archive

tar -czf *<out.tar.gz>* *<path>*...
Create gzip archive

tar -cjf *<out.tar.bz2>* *<path>*...
Create bzip2 archive

tar -cJf *<out.tar.xz>* *<path>*...
Create xz archive

tar --zstd -cf *<out.tar.zst>* *<path>*...
Create zstd archive

tar -czvf *<out.tar.gz>* *<path>*
Create, list files as added

tar -czf *<out.tar.gz>* **-C** *<dir>* .
Pack a dir's contents, no prefix

EXTRACT

tar -xf *<archive>*
Extract everything

tar -xf *<archive>* **-C** *<dir>*
Extract into a directory

tar -xzf *<archive>*
Extract, forcing gzip

tar -xf *<archive>* *<member>*...
Extract named members only

tar -xf *<archive>* **--wildcards '*.conf'**
Extract members by pattern

EXTRACT (cont.)

tar -xf *<archive>* **--strip-components=1**
Drop leading path levels

tar -xvf *<archive>*
Extract and show names

tar -xf *<archive>* **--keep-old-files**
Never overwrite existing files

LIST AND CHECK

tar -tf *<archive>*
List member names

tar -tvf *<archive>*
List with size, owner, date

tar -tf *<archive>* **| grep** *<pat>*
Find a file in an archive

tar -tf *<archive>* **| head**
Peek at the first entries

SELECT FILES

--exclude=*<pattern>*
Skip matching names

--exclude-from=*<file>*
Read exclude patterns from file

--exclude-vcs
Skip .git, .svn and similar

-C *<dir>*
Change directory first

-T *<file>*
Read paths from a file

COMPRESSION

-z / --gzip
Filter through gzip

-j / --bzip2
Filter through bzip2

-J / --xz
Filter through xz

--zstd
Filter through zstd

-a / --auto-compress
Pick compressor from the suffix