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

EXTRACT (cont.)

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

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

`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

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 / --xz`
Filter through xz

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