

NAME

tar – manual page for tar 1.26

SYNOPSIS

tar [*OPTION...*] [*FILE*]...

DESCRIPTION

GNU ‘tar’ saves many files together into a single tape or disk archive, and can restore individual files from the archive.

Note that this manual page contains just very brief description (or more like a list of possible functionality) originally generated by the **help2man** utility. The full documentation for **tar** is maintained as a Texinfo manual. If the **info** and **tar** programs are properly installed at your site, the command ‘**info tar**’ should give you access to the complete manual.

EXAMPLES

```
tar -cf archive.tar foo bar
    # Create archive.tar from files foo and bar.

tar -tvf archive.tar
    # List all files in archive.tar verbosely.

tar -xf archive.tar
    # Extract all files from archive.tar.
```

DEFAULTS

This tar installation defaults to:

```
--format=gnu    -f-    -b20    --quoting-style=escape    --rmt-command=/sbin/rmt    --rsh-command=/usr/bin/rsh
```

Main operation mode:

```
-A, --catenate, --concatenate
    append tar files to an archive

-c, --create
    create a new archive

-d, --diff, --compare
    find differences between archive and file system

--delete
    delete from the archive (not on mag tapes!)

-r, --append
    append files to the end of an archive

-t, --list
    list the contents of an archive

--test-label
    test the archive volume label and exit

-u, --update
    only append files newer than copy in archive

-x, --extract, --get
    extract files from an archive
```

Common options:

```
-C, --directory=DIR
    change to directory DIR
```

- f, --file=ARCHIVE**
use archive file or device ARCHIVE
- j, --bzip2**
filter the archive through bzip2
- J, --xz**
filter the archive through xz
- p, --preserve-permissions**
extract information about file permissions (default for superuser)
- v, --verbose**
verbosely list files processed
- z, --gzip**
filter the archive through gzip

Operation modifiers:

- check-device**
check device numbers when creating incremental archives (default)
- g, --listed-incremental=FILE**
handle new GNU-format incremental backup
- G, --incremental**
handle old GNU-format incremental backup
- ignore-failed-read**
do not exit with nonzero on unreadable files
- level=NUMBER**
dump level for created listed-incremental archive
- n, --seek**
archive is seekable
- no-check-device**
do not check device numbers when creating incremental archives
- no-seek**
archive is not seekable
- occurrence[=NUMBER]**
process only the NUMBERth occurrence of each file in the archive; this option is valid only in conjunction with one of the subcommands **--delete**, **--diff**, **--extract** or **--list** and when a list of files is given either on the command line or via the **-T** option; NUMBER defaults to 1
- sparse-version=MAJOR[.MINOR]**
set version of the sparse format to use (implies **--sparse**)
- S, --sparse**
handle sparse files efficiently

Overwrite control:

- k, --keep-old-files**
don't replace existing files when extracting, treat them as errors
- keep-newer-files**
don't replace existing files that are newer than their archive copies
- no-overwrite-dir**
preserve metadata of existing directories

- overwrite**
overwrite existing files when extracting
- overwrite-dir**
overwrite metadata of existing directories when extracting (default)
- recursive-unlink**
empty hierarchies prior to extracting directory
- remove-files**
remove files after adding them to the archive
- skip-old-files**
don't replace existing files when extracting, silently skip over them
- U, --unlink-first**
remove each file prior to extracting over it
- W, --verify**
attempt to verify the archive after writing it

Select output stream:

- ignore-command-error** ignore exit codes of children
- no-ignore-command-error**
treat non-zero exit codes of children as error
- O, --to-stdout**
extract files to standard output
- to-command=COMMAND**
pipe extracted files to another program

Handling of file attributes:

- atime-preserve[=METHOD]**
preserve access times on dumped files, either by restoring the times after reading (METHOD='replace'; default) or by not setting the times in the first place (METHOD='system')
- delay-directory-restore**
delay setting modification times and permissions of extracted directories until the end of extraction
- group=NAME**
force NAME as group for added files
- mode=CHANGES**
force (symbolic) mode CHANGES for added files
- mtime=DATE-OR-FILE**
set mtime for added files from DATE-OR-FILE
- m, --touch**
don't extract file modified time
- no-delay-directory-restore**
cancel the effect of **--delay-directory-restore** option
- no-same-owner**
extract files as yourself (default for ordinary users)
- no-same-permissions**
apply the user's umask when extracting permissions from the archive (default for ordinary users)
- numeric-owner**
always use numbers for user/group names

--owner=NAME
force NAME as owner for added files

-p, --preserve-permissions, --same-permissions
extract information about file permissions (default for superuser)

--preserve
same as both **-p** and **-s**

--same-owner
try extracting files with the same ownership as exists in the archive (default for superuser)

-s, --preserve-order, --same-order
sort names to extract to match archive

Handling of extended file attributes:

--acls Enable the POSIX ACLs support

--no-acls
Disable the POSIX ACLs support

--no-selinux
Disable the SELinux context support

--no-xattrs
Disable extended attributes support

--selinux
Enable the SELinux context support

--xattrs
Enable extended attributes support

--xattrs-exclude=MASK
specify the exclude pattern for xattr keys

--xattrs-include=MASK
specify the include pattern for xattr keys

Device selection and switching:

-f, --file=ARCHIVE
use archive file or device ARCHIVE

--force-local
archive file is local even if it has a colon

-F, --info-script=NAME, --new-volume-script=NAME
run script at end of each tape (implies **-M**)

-L, --tape-length=NUMBER
change tape after writing NUMBER x 1024 bytes

-M, --multi-volume
create/list/extract multi-volume archive

--rmt-command=COMMAND
use given rmt COMMAND instead of rmt

--rsh-command=COMMAND
use remote COMMAND instead of rsh

--volno-file=FILE
use/update the volume number in FILE

Device blocking:

- b, --blocking-factor=BLOCKS**
BLOCKS x 512 bytes per record
- B, --read-full-records**
reblock as we read (for 4.2BSD pipes)
- i, --ignore-zeros**
ignore zeroed blocks in archive (means EOF)
- record-size=NUMBER**
NUMBER of bytes per record, multiple of 512

Archive format selection:

- H, --format=FORMAT**
create archive of the given format

FORMAT is one of the following:

- gnu GNU tar 1.13.x format
- oldgnu GNU format as per tar <= 1.12
- pax POSIX 1003.1–2001 (pax) format
- posix same as pax
- ustar POSIX 1003.1–1988 (ustar) format
- v7 old V7 tar format

- old-archive, --portability**
same as **--format=v7**
- pax-option=keyword[:=value][,keyword[:=value]]...**
control pax keywords
- posix**
same as **--format=posix**
- V, --label=TEXT**
create archive with volume name TEXT; at list/extract time, use TEXT as a globbing pattern for volume name

Compression options:

- a, --auto-compress**
use archive suffix to determine the compression program
- I, --use-compress-program=PROG**
filter through PROG (must accept **-d**)
- j, --bzip2**
filter the archive through bzip2
- J, --xz**
filter the archive through xz
- lzip** filter the archive through lzip
- lzma**
filter the archive through lzma
- lzop**
- no-auto-compress**
do not use archive suffix to determine the compression program

-z, --gzip, --gunzip, --ungzip
filter the archive through gzip

-Z, --compress, --uncompress
filter the archive through compress

Note: You might need to install external program (lzip/ncompress/lzma...) to use some of these compression options

Local file selection:

--add-file=FILE
add given FILE to the archive (useful if its name starts with a dash)

--backup[=CONTROL]
backup before removal, choose version CONTROL

-C, --directory=DIR
change to directory DIR

--exclude=PATTERN
exclude files, given as a PATTERN

--exclude-backups
exclude backup and lock files

--exclude-caches
exclude contents of directories containing CACHEDIR.TAG, except for the tag file itself

--exclude-caches-all
exclude directories containing CACHEDIR.TAG

--exclude-caches-under exclude everything under directories containing CACHEDIR.TAG

--exclude-tag=FILE
exclude contents of directories containing FILE, except for FILE itself

--exclude-tag-all=FILE exclude directories containing FILE

--exclude-tag-under=FILE
exclude everything under directories containing FILE

--exclude-vcs
exclude version control system directories

-h, --dereference
follow symlinks; archive and dump the files they point to

--hard-dereference
follow hard links; archive and dump the files they refer to

-K, --starting-file=MEMBER-NAME
begin at member MEMBER-NAME in the archive

--newer-mtime=DATE
compare date and time when data changed only

--no-null
disable the effect of the previous **--null** option

--no-recursion
avoid descending automatically in directories

--no-unquote
do not unquote filenames read with **-T**

--null **-T** reads null-terminated names, disable **-C**

- N, --newer=DATE-OR-FILE, --after-date=DATE-OR-FILE**
only store files newer than DATE-OR-FILE
- one-file-system**
stay in local file system when creating archive
- P, --absolute-names**
don't strip leading '/'s from file names
- recursion**
recurse into directories (default)
- suffix=STRING**
backup before removal, override usual suffix ('~' unless overridden by environment variable SIMPLE_BACKUP_SUFFIX)
- T, --files-from=FILE**
get names to extract or create from FILE
- unquote**
unquote filenames read with -T (default)
- X, --exclude-from=FILE**
exclude patterns listed in FILE

File name transformations:

- strip-components=NUMBER**
strip NUMBER leading components from file names on extraction
- transform=EXPRESSION, --xform=EXPRESSION**
use sed replace EXPRESSION to transform file names
- File name matching options (affect both exclude and include patterns):
- anchored**
patterns match file name start
- ignore-case**
ignore case
- no-anchored**
patterns match after any '/' (default for exclusion)
- no-ignore-case**
case sensitive matching (default)
- no-wildcards**
verbatim string matching
- no-wildcards-match-slash**
wildcards do not match '/'
- wildcards**
use wildcards (default)
- wildcards-match-slash**
wildcards match '/' (default for exclusion)

Informative output:

- checkpoint[=NUMBER]**
display progress messages every NUMBERth record (default 10)
- checkpoint-action=ACTION**
execute ACTION on each checkpoint

--full-time
print file time to its full resolution

--index-file=FILE
send verbose output to FILE

-l, --check-links
print a message if not all links are dumped

--no-quote-chars=STRING
disable quoting for characters from STRING

--quote-chars=STRING
additionally quote characters from STRING

--quoting-style=STYLE
set name quoting style; see below for valid STYLE values

-R, --block-number
show block number within archive with each message

--show-defaults
show tar defaults

--show-omitted-dirs
when listing or extracting, list each directory that does not match search criteria

--show-transformed-names, --show-stored-names
show file or archive names after transformation

--totals[=SIGNAL]
print total bytes after processing the archive; with an argument – print total bytes when this SIGNAL is delivered; Allowed signals are: SIGHUP, SIGQUIT, SIGINT, SIGUSR1 and SIGUSR2; the names without SIG prefix are also accepted

--utc print file modification dates in UTC

-v, --verbose
verbosely list files processed

--warning=KEYWORD
warning control

-w, --interactive, --confirmation
ask for confirmation for every action

Compatibility options:

-o when creating, same as **--old-archive**; when extracting, same as **--no-same-owner**

Other options:

-, --help
give this help list

--restrict
disable use of some potentially harmful options

--usage
give a short usage message

--version
print program version

Mandatory or optional arguments to long options are also mandatory or optional for any corresponding short options.

The backup suffix is ‘~’, unless set with **--suffix** or SIMPLE_BACKUP_SUFFIX. The version control may be set with **--backup** or VERSION_CONTROL, values are:

none, off
never make backups

t, numbered
make numbered backups

nil, existing
numbered if numbered backups exist, simple otherwise

never, simple
always make simple backups

Valid arguments for the **---quoting-style** option are:

literal shell shell-always c c-maybe escape locale clocale

AUTHOR

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REPORTING BUGS

Report bugs to <bug-tar@gnu.org>.

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