

**NAME**

**gzip**, **gunzip**, **zcat** - compression/decompression tool using Lempel-Ziv coding (LZ77)

**SYNOPSIS**

**gzip** [-cdfhkLlNnqrtVv] [-S *suffix*] *file* [*file* [...]]

**gunzip** [-cdfhkLNqrtVv] [-S *suffix*] *file* [*file* [...]]

**zcat** [-fhV] *file* [*file* [...]]

**DESCRIPTION**

The **gzip** program compresses and decompresses files using Lempel-Ziv coding (LZ77). If no *files* are specified, **gzip** will compress from standard input, or decompress to standard output. When in compression mode, each *file* will be replaced with another file with the suffix, set by the **-S *suffix*** option, added, if possible.

In decompression mode, each *file* will be checked for existence, as will the file with the suffix added. Each *file* argument must contain a separate complete archive; when multiple *files* are indicated, each is decompressed in turn.

In the case of **gzcat** the resulting data is then concatenated in the manner of **cat(1)**.

If invoked as **gunzip** then the **-d** option is enabled. If invoked as **zcat** or **gzcat** then both the **-c** and **-d** options are enabled.

This version of **gzip** is also capable of decompressing files compressed using **compress(1)**, **bzip2(1)**, **lzip**, **zstd(1)**, or **xz(1)**.

**OPTIONS**

The following options are available:

**-1, --fast**

**-2, -3, -4, -5, -6, -7, -8**

**-9, --best**

These options change the compression level used, with the **-1** option being the fastest, with less compression, and the **-9** option being the slowest, with optimal compression. The default compression level is 6.

**-c, --stdout, --to-stdout**

This option specifies that output will go to the standard output stream, leaving files intact.

**-d, --decompress, --uncompress**

This option selects decompression rather than compression.

**-f, --force**

This option turns on force mode. This allows files with multiple links, symbolic links to regular files, overwriting of pre-existing files, reading from or writing to a terminal, and when combined with the **-c** option, allowing non-compressed data to pass through unchanged.

**-h, --help**

This option prints a usage summary and exits.

**-k, --keep**

This option prevents **gzip** from deleting input files after (de)compression.

**-L, --license**

This option prints **gzip** license.

**-l, --list**

This option displays information about the file's compressed and uncompressed size, ratio, uncompressed name. With the **-v** option, it also displays the compression method, CRC, date and time embedded in the file.

**-N, --name**

This option causes the stored filename in the input file to be used as the output file.

**-n, --no-name**

This option stops the filename and timestamp from being stored in the output file.

**-q, --quiet**

With this option, no warnings or errors are printed.

**-r, --recursive**

This option is used to **gzip** the files in a directory tree individually, using the fts(3) library.

**-S *suffix*, --suffix *suffix***

This option changes the default suffix from *.gz* to *suffix*.

**-t, --test**

This option will test compressed files for integrity.

**-V, --version**

This option prints the version of the **gzip** program.

**-v, --verbose**

This option turns on verbose mode, which prints the compression ratio for each file compressed.

**ENVIRONMENT**

If the environment variable GZIP is set, it is parsed as a white-space separated list of options handled

before any options on the command line. Options on the command line will override anything in GZIP.

## EXIT STATUS

The **gzip** utility exits 0 on success, 1 on errors, and 2 if a warning occurs.

## SIGNALS

**gzip** responds to the following signals:

### SIGINFO

Report progress to standard error.

## SEE ALSO

bzip2(1), compress(1), zstd(1), xz(1), fts(3), zlib(3)

## HISTORY

The **gzip** program was originally written by Jean-loup Gailly, licensed under the GNU Public Licence. Matthew R. Green wrote a simple front end for NetBSD 1.3 distribution media, based on the freely redistributable zlib library. It was enhanced to be mostly feature-compatible with the original GNU **gzip** program for NetBSD 2.0.

This implementation of **gzip** was ported based on the NetBSD **gzip** version 20181111, and first appeared in FreeBSD 7.0.

## AUTHORS

This implementation of **gzip** was written by Matthew R. Green <mrg@eterna.com.au> with unpack support written by Xin LI <delphij@FreeBSD.org>.

## BUGS

According to RFC 1952, the recorded file size is stored in a 32-bit integer, therefore, it cannot represent files larger than 4GB. This limitation also applies to **-l** option of **gzip** utility.