Rocky Enterprise Linux 9.2 Manual Pages on command 'mksquashfs.1'

$ man mksquashfs.1

MKSQUASHFS(1) create and append squashfs filesystems MKSQUASHFS(1)

NAME

mksquashfs - tool to create and append to squashfs filesystems

SYNOPSIS

mksquashfs SOURCE [SOURCE2 ...] DESTINATION [OPTIONS]

DESCRIPTION

Squashfs is a highly compressed read-only filesystem for Linux. It uses zlib compression to compress both files, inodes and directories. Inodes in the system are very small and all blocks are packed to minimize data overhead. Block sizes greater than 4K are supported up to a maximum of 64K.

Squashfs is intended for general read-only filesystem use, for archival use (i.e. in cases where a .tar.gz file may be used), and in con? strained block device/memory systems (e.g. embedded systems) where low overhead is needed.

OPTIONS

Filesystem build options

-comp COMPRESSION

select COMPRESSION compression. Compressors available: gzip (de?
fault), lzma (no kernel support), lzo, lz4 and xz.

-b BLOCK_SIZE

set data block to BLOCK_SIZE. Default 131072 bytes. Optionally K or
M can be used as a suffix to specify kilobytes or megabytes, re?
spectively.

-no-exports

don't make the filesystem exportable via NFS.

-no-sparse

don't detect sparse files.

-no-xattrs

don't store extended attributes.

-xattrs

store extended attributes (default).

-noI

do not compress inode table.

-noD

do not compress data blocks.

-noF

do not compress fragment blocks.

-noX

do not compress extended attributes.

-no-fragments

do not use fragments.

-always-use-fragments

use fragment blocks for files larger than block size.

-no-duplicates

do not perform duplicate checking.

-all-root

make all files owned by root.

-force-uid uid

set all file uids to uid.

-force-gid gid

set all file gids to gid.

-nopad

do not pad filesystem to a multiple of 4K.

-keep-as-directory

if one source directory is specified, create a root directory con?

taining that directory, rather than the contents of the directory.

-all-time time

32 bit integer indicating seconds since the epoch (1970-01-01) used

for the timestamp for all files. The SOURCE_DATE_EPOCH environment

variable can also be used.

Filesystem filter options

-p PSEUDO_DEFINITION

Add pseudo file definition.

-pf PSEUDO_FILE

Add list of pseudo file definitions.

-sort SORT_FILE

sort files according to priorities in SORT_FILE. One file or dir

with priority per line. Priority -32768 to 32767, default priority

0.

-ef EXCLUDE_FILE

list of exclude dirs/files. One per line.

-wildcards

Allow extended shell wildcards (globbing) to be used in exclude

dirs/files

-regex

Allow POSIX regular expressions to be used in exclude dirs/files.

Filesystem append options

-noappend

do not append to existing filesystem.

-root-becomes NAME

when appending source files/directories, make the original root be?

come a subdirectory in the new root called NAME, rather than adding

the new source items to the original root.

Mksquashfs runtime options:

-version

print version, licence and copyright message.

-exit-on-error

treat normally ignored errors as fatal.

-recover NAME

recover filesystem data using recovery file NAME.

-no-recovery

don't generate a recovery file.

-info

print files written to filesystem.

-no-progress

don't display the progress bar.

-progress

display progress bar when using the -info option.

-processors NUMBER

Use NUMBER processors. By default will use number of processors available.

-mem SIZE

Use SIZE physical memory. Optionally K or M can be used as a suffix for kilobytes or megabytes, respectively. Default 25% of memory.

-read-queue SIZE

Deprecated. Use -mem instead.

-write-queue SIZE

Deprecated. Use -mem instead.

-fragment-queue SIZE

Deprecated. Use -mem instead.

-mkfs-time time

32 bit integer indicating seconds since the epoch (1970-01-01). The SOURCE_DATE_EPOCH environment variable can also be used.

-not-reproducible

This option tells Mksquashfs that the files do not have to be strictly ordered.

Miscellaneous options

-root-owned

alternative name for -all-root.

-noInodeCompression

alternative name for -noI.

-noDataCompression

alternative name for -noD.

-noFragmentCompression

alternative name for -noF.

-noXattrCompression

alternative name for -noX.

-Xhelp

print compressor options for selected compressor

Compressors available and compressor specific options

gzip (default)

-Xcompression-level compression-level

compression-level should be 1 .. 9 (default 9)

-Xwindow-size window-size

window-size should be 8 .. 15 (default 15)

-Xstrategy strategy1,strategy2,...,strategyN

Compress using strategy1,strategy2,...,strategyN in turn and choose the best compression. Available strategies: default, filtered, huffman_only, run_length_encoded and fixed

lzmz (no options) (no kernel support)

lzo

-Xalgorithm algorithm

Where algorithm is one of: lzo1x_1, lzo1x_1_11, lzo1x_1_12, lzo1x_1_15 or lzo1x_999. (default lzo1x_999)

-Xcompression-level compression-level

compression-level should be 1 .. 9 (default 8)

lz4

-Xhc

Compress using LZ4 High Compression

xz

-Xbcj filter1,filter2,...,filterN

Compress using filter1,filter2,...,filterN in turn (in addition to no filter), and choose the best compression. Available filters: x86, arm, armthumb, powerpc, sparc, ia64.

-Xdict-size DICT_SIZE

Use DICT_SIZE as the XZ dictionary size. The dictionary size can be specified as a percentage of the block size, or as an absolute value. The dictionary size must be less than or equal to the block size and 8192 bytes or larger. It must also be storable in the xz header as either 2^n or as 2^n+2^(n+1). Example dict-sizes are 75%, 50%, 37.5%, 25%, or 32K, 16K, 8K etc.

zstd

-Xcompression-level <compression-level>

<compression-level> should be 1 .. 22 (default 15)

SEE ALSO

unsquashfs(1)

HOMEPAGE

More information about mksquashfs and the squashfs filesystem can be found at <http://squashfs.sourceforge.net/>.

AUTHOR

squashfs was written by Phillip Lougher <plougher@users.sourceforge.net>.

This manual page was written by Daniel Baumann <daniel.baumann@progress-technologies.net>. With some updates for 4.4 for use with Fedora.

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