## **NAME**

7z – A file archiver with high compression ratio format

#### **SYNOPSIS**

7z <command> [<switches>... ] <archive\_name> [<file\_names>... ] [<@listfiles>... ]

## DESCRIPTION

7-Zip is a file archiver supporting 7z (that implements LZMA compression algorithm featuring very high compression ratio), LZMA2, XZ, ZIP, Zip64, CAB, RAR (if the non-free p7zip-rar package is installed), ARJ, GZIP, BZIP2, TAR, CPIO, RPM, ISO, most filesystem images and DEB formats. Compression ratio in the new 7z format is 30-50% better than ratio in ZIP format.

7z uses plugins to handle archives, so it might be slightly slower than 7za(1) but can handle more archive formats.

## **COMMANDS**

- **a** Add files to archive
- **b** Benchmark
- **d** Delete files from archive
- **e** Extract files from archive (without using directory names)
- **h** Calculate hash values for files
- i Show information about supported formats
- l List contents of archive
- **rn** Rename files in archive
- t Test integrity of archive
- **u** Update files to archive
- **x** eXtract files with full paths

## **SWITCHES**

Stop switches parsing

### -ai[r[-|0]]{@listfile|!wildcard}

Include archives

# -ax[r[-|0]]{@listfile|!wildcard}

Exclude archives

## $-ao\{a|s|t|u\}$

Set Overwrite mode

-an Disable archive name field

# -bb[0-3]

Set output log level

**-bd** Disable progress indicator

## $-bs\{o|e|p\}\{0|1|2\}$

Set output stream for output/error/progress line

**-bt** Show execution time statistics

## $-i[r[-|0]]{@listfile|!wildcard}$

Include filenames

#### -m{Parameters}

Set Compression Method (see /usr/share/doc/p7zip/DOC/MANUAL/cmd-line/switches/method.htm from the p7zip-full package for a list of methods)

# -o{Directory}

Set Output directory

## -p{Password}

Set Password (NOTE: this flag does not work with 7zr)

 $-\mathbf{r}[-|\mathbf{0}]$  Recurse subdirectories (CAUTION: this flag does not do what you think, avoid using it)

## $-sa\{a|e|s\}$

Set archive name mode

# -scc{UTF-8|WIN|DOS}

Set charset for for console input/output

## $-scs\{UTF-8|UTF-16LE|UTF-16BE|WIN|DOS|\{id\}\}$

Set charset for list files

## -scrc[CRC32|CRC64|SHA1|SHA256|\*]

Set hash function for x, e, h commands

-sdel Delete files after compression

### -seml[.]

Send archive by email

## -sfx[{name}]

Create SFX archive

## -si[{name}]

Read data from stdin (e.g. tar cf – directory | 7z a –si directory.tar.7z)

- -slp Set Large Pages mode
- -slt Show technical information for 1 (List) command
- -snh Store hard links as links
- **-snl** Store symbolic links as links
- -sni Store NT security information

### -sns[-]

Store NTFS alternate streams

# -sfx[{name}]

Create SFX archive

- -so Write data to stdout (e.g.  $7z \times -so = tar.7z \mid tar \times f tar.7z \mid tar \times f tar.7z \mid ta$
- **-spd** Disable wildcard matching for file names
- -spe Eliminate duplication of root folder for extract command
- **-spf** Use fully qualified file paths
- -ssc[-] Set sensitive case mode
- -ssw Compress shared files
- **-stl** Set archive timestamp from the most recently modified file

# $-stm\{HexMask\}$

Set CPU thread affinity mask (hexadecimal number)

## -stx{Type}

Exclude archive type

## -t{Type}

Set type of archive

# -u[-][p#][q#][r#][x#][y#][z#][!newArchiveName]

Update options

## $-v{Size}[b|k|m|g]$

Create volumes

## -w[path]

Set working directory. Empty path means a temporary directory

# $-x[r[-|0]]]{@listfile|!wildcard}$

Exclude filenames

-y Assume Yes on all queries

# **DIAGNOSTICS**

7-Zip returns the following exit codes:

- 0 Normal (no errors or warnings detected)
- Warning (Non fatal error(s)). For example, some files cannot be read during compressing, so they were not compressed
- 2 Fatal error
- 7 Bad command line parameters
- 8 Not enough memory for operation
- User stopped the process with control-C (or similar)

## **Backup and limitations**

DO NOT USE the 7-zip format for backup purpose on Linux/Unix because :

-7-zip does not store the owner/group of the file.

On Linux/Unix, in order to backup directories you must use tar:

- to backup a directory: tar cf directory | 7z a -si directory.tar.7z
- to restore your backup: 7z x -so directory.tar.7z | tar xf -

If you want to send files and directories (not the owner of file) to others Unix/MacOS/Windows users, you can use the 7-zip format.

```
example: 7z a directory.7z directory
```

Do not use "-r" because this flag does not do what you think.

Do not use directory/\* because of ".\*" files (example: "directory/\*" does not match "directory/,profile")

#### EXAMPLE 1

# 7z a -t7z -m0=lzma -mx=9 -mfb=64 -md=32m -ms=on archive.7z dir1

adds all files from directory "dir1" to archive archive.7z using "ultra settings"

**−t7z** 7z archive

## -m0=lzma

lzma method

-mx=9 level of compression = 9 (Ultra)

# -mfb=64

number of fast bytes for LZMA = 64

#### -md=32m

dictionary size = 32 megabytes

## -ms=on

solid archive = on

## **EXAMPLE 2**

# 7z a -sfx archive.exe dir1

add all files from directory "dir1" to SFX archive archive.exe (Remark : SFX archive MUST end with ".exe")

# **EXAMPLE 3**

# 7z a -mhe=on -pmy\_password archive.7z a\_directory

add all files from directory "a\_directory" to the archive "archive.7z" (with data and header archive encryption on)

# **SEE ALSO**

7zr(1), 7za(1), p7zip(1), bzip2(1), gzip(1), zip(1),

## **HTML Documentation**

/usr/share/doc/p7zip-full/DOC/MANUAL/start.htm

## **AUTHOR**

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