

NAME

cpio – copy files to and from archives

SYNOPSIS

```
cpio {-o|--create} [-0acvABLV] [-C BYTES] [-H FORMAT] [-M MESSAGE] [-O
[[USER@]HOST:]ARCHIVE] [-F [[USER@]HOST:]ARCHIVE] [--file=[[USER@]HOST:]ARCHIVE]
[--format=FORMAT] [--message=MESSAGE] [--null] [--reset-access-time] [--verbose] [--dot]
[--append] [--block-size=blocks] [--dereference] [--io-size=BYTES] [--quiet] [--force-local]
[--rsh-command=COMMAND] <name-list [> archive]
```

```
cpio {-i|--extract} [-bcdfmnrtsuvBSV] [-C BYTES] [-E FILE] [-H FORMAT] [-M MESSAGE] [-R
[USER][:][GROUP]] [-I [[USER@]HOST:]ARCHIVE] [-F [[USER@]HOST:]ARCHIVE]
[--file=[[USER@]HOST:]ARCHIVE] [--make-directories] [--nonmatching] [--preserve-modifica-
tion-time] [--numeric-uid-gid] [--rename] [--list] [--swap-bytes] [--swap] [--dot] [--uncondi-
tional] [--verbose] [--block-size=BLOCKS] [--swap-halfwords] [--io-size=BYTES] [--pat-
tern-file=FILE] [--format=FORMAT] [--owner=[USER][:][GROUP]] [--no-preserve-owner]
[--message=MESSAGE] [--force-local] [--no-absolute-filenames] [--sparse] [--only-verify-crc]
[--to-stdout] [--quiet] [--rsh-command=COMMAND] [--extract-over-symlinks] [pattern...] [<
archive]
```

```
cpio {-p|--pass-through} [-0adlmuvLV] [-R [USER][:][GROUP]] [--null] [--reset-access-time]
[--make-directories] [--link] [--quiet] [--preserve-modification-time] [--unconditional] [--ver-
bose] [--dot] [--dereference] [--owner=[USER][:][GROUP]] [--no-preserve-owner] [--sparse]
destination-directory <name-list
```

```
cpio {-?|--help|--usage|--version}
```

REPORTING BUGS

Report cpio bugs to bug-cpio@gnu.org

GNU cpio home page: <<http://www.gnu.org/software/cpio/>>

General help using GNU software: <<http://www.gnu.org/gethelp/>>

Report cpio translation bugs to <<http://translationproject.org/team/>>

SEE ALSO

cpio(5)

DESCRIPTION

GNU **cpio** copies files between archives and directories. It supports the following archive formats: old binary cpio, old portable cpio, SVR4 cpio with and without checksum, HP cpio, and various tar formats.

The operation mode is requested by one of the following options:

-o, --create

Copy-out. Read a list of file names from the standard input and create on the standard output (unless overridden by the **--file** option) an archive containing these files.

-i, --extract

Copy-in. Read the archive from standard input (or from the file supplied with the **--file** option) and extract files from it, or (if the **-t** option is given) list its contents to the standard output. If one or more *patterns* are supplied, read or list only files matching these patterns. The **-t** option alone implies **-i**.

-p, --pass-through

Pass-through. Read a list of file names from the standard input and copy them to the specified directory.

-?, --help

Give a short help summary and exit.

--usage
Print a short usage message and exit.

--version
Print program version and exit.

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OPTIONS

Operation modifiers valid in any mode

--block-size=BLOCK-SIZE
Set the I/O block size to *BLOCK-SIZE* * 512 bytes.

-B Set the I/O block size to 5120 bytes.

-c Use the old portable (ASCII) archive format. This is the same as **-H odc**.

-C, --io-size=NUMBER
Set the I/O block size to the given *NUMBER* of bytes.

-D, --directory=DIR
Change to directory *DIR*.

--force-local
Archive file is local, even if its name contains colons.

-H, --format=FORMAT
Use given archive **FORMAT**. Valid formats are (the number in parentheses gives maximum size for individual archive member):

bin The obsolete binary format. (2147483647 bytes)

odc The old (POSIX.1) portable format. (8589934591 bytes)

newc The new (SVR4) portable format, which supports file systems having more than 65536 inodes. (4294967295 bytes)

crc The new (SVR4) portable format with a checksum added.

tar The old tar format. (8589934591 bytes)

ustar The POSIX.1 tar format. Also recognizes GNU tar archives, which are similar but not identical. (8589934591 bytes)

hpbm The obsolete binary format used by HPUNIX's cpio (which stores device files differently).

hpodc The portable format used by HPUNIX's cpio (which stores device files differently).

-R, --owner=[USER][:][GROUP]
In copy-in and copy-pass mode, set the ownership of all files created to the specified *USER* and/or *GROUP*. In copy-out mode, store the supplied owner information in the archive.

USER and *GROUP* are first looked up in the system user and group databases. If not found, **cpio** checks if they consist of decimal digits only and, if so, treats them as numeric UID and GID, correspondingly.

To avoid the lookup and ensure that arguments are treated as numeric values, prefix them with a plus sign, e.g.: **-R +0:+0**.

--quiet
Do not print the number of blocks copied at the end of the run.

- rsh-command=COMMAND**
Use remote *COMMAND* instead of **rsh**.
- v, --verbose**
Verbosely list the files processed.
- V, --dot**
Print a "." for each file processed.
- W, --warning=FLAG**
Controls warning display. The *FLAG* is one of **none**, to disable all warnings, **all** to enable them, **truncate**, to enable warnings about field truncation, and **no-truncate**, to disable them.
Multiple **-W** options accumulate.

Operation modifiers valid in copy-in and copy-out modes

- F, --file=[[USER@]HOST:]ARCHIVE-FILE**
Use this *ARCHIVE-FILE* instead of standard input (in copy-in mode) or standard output (in copy-out mode). Optional *USER* and *HOST* specify the user and host names in case of a remote archive.
- M, --message=STRING**
Print *STRING* when the end of a volume of the backup media is reached.

Operation modifiers valid only in copy-in mode

- b, --swap**
Swap both halfwords of words and bytes of halfwords in the data. Equivalent to **-sS**.
- f, --nonmatching**
Only copy files that do not match any of the given patterns.
- n, --numeric-uid-gid**
In the verbose table of contents listing, show numeric UID and GID.
- r, --rename**
Interactively rename files.
- s, --swap-bytes**
Swap the bytes of each halfword in the files.
- S, --swap-halfwords**
Swap the halfwords of each word (4 bytes) in the files.
- to-stdout**
Extract files to standard output.
- E, --pattern-file=FILE**
Read additional patterns specifying filenames to extract or list from *FILE*.
- only-verify-crc**
When reading a CRC format archive, only verify the CRC's of each file in the archive, without actually extracting the files.

Operation modifiers valid only in copy-out mode

- A, --append**
Append to an existing archive.
- device-independent, --reproducible**
Create reproducible archives. This is equivalent to **--ignore-devno --renumber-inodes**.
- ignore-devno**
Store 0 in the device number field of each archive member, instead of the actual device number.
- O [[USER@]HOST:]ARCHIVE-NAME**
Use *ARCHIVE-NAME* instead of standard output. Optional *USER* and *HOST* specify the user and host names in case of a remote archive.

The output archive name can be specified wither using this option, or using **-F** (**--file**), but not both.

--renumber-inodes

Renumber inodes when storing them in the archive.

Operation modifiers valid only in copy-pass mode

-l, --link

Link files instead of copying them, when possible.

Operation modifiers valid in copy-in and copy-out modes

--absolute-filenames

Do not strip file system prefix components from the file names.

--no-absolute-filenames

Create all files relative to the current directory.

Operation modifiers valid in copy-out and copy-pass modes

-0, --null

Filenames in the list are delimited by null characters instead of newlines.

-a, --reset-access-time

Reset the access times of files after reading them.

-I [[USER@]HOST:]ARCHIVE-NAME

Use *ARCHIVE-NAME* instead of standard input. Optional *USER* and *HOST* specify the user and host names in case of a remote archive.

The input archive name can be specified wither using this option, or using **-F** (**--file**), but not both.

-L, --dereference

Dereference symbolic links (copy the files that they point to instead of copying the links).

Operation modifiers valid in copy-in and copy-pass modes

-d, --make-directories

Create leading directories where needed.

-m, --preserve-modification-time

Retain previous file modification times when creating files.

--no-preserve-owner

Do not change the ownership of the files.

--sparse

Write files with large blocks of zeros as sparse files.

-u, --unconditional

Replace all files unconditionally.

RETURN VALUE

GNU **cpio** exits with code **0** if it was able to successfully complete the requested operation. On errors, it exits with code **2**.

SEE ALSO

[tar\(1\)](#), [rmt\(8\)](#), [mt\(1\)](#).

BUG REPORTS

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

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