

NAME

truncate - truncate, extend the length of files, or perform space management in files

SYNOPSIS

truncate [-c] -s [+|-|%/|/]size[SUFFIX] file ...

truncate [-c] -r rfile file ...

truncate [-c] -d [-o offset[SUFFIX]] -l length[SUFFIX] file ...

DESCRIPTION

The **truncate** utility adjusts the length of each regular file given on the command-line, or performs space management with the given offset and the length over a regular file given on the command-line.

The following options are available:

-c Do not create files if they do not exist. The **truncate** utility does not treat this as an error. No error messages are displayed and the exit value is not affected.

-r rfile

Truncate or extend files to the length of the file *rfile*.

-s [+|-|%/|/]size[SUFFIX]

If the *size* argument is preceded by a plus sign (+), files will be extended by this number of bytes. If the *size* argument is preceded by a dash (-), file lengths will be reduced by no more than this number of bytes, to a minimum length of zero bytes. If the *size* argument is preceded by a percent sign (%), files will be round up to a multiple of this number of bytes. If the *size* argument is preceded by a slash sign (/), files will be round down to a multiple of this number of bytes, to a minimum length of zero bytes. Otherwise, the *size* argument specifies an absolute length to which all files should be extended or reduced as appropriate.

-d Zero a region in the specified file. If the underlying file system of the given file supports hole-punching, file system space deallocation may be performed in the operation region.

-o offset

The space management operation is performed at the given *offset* bytes in the file. If this option is not specified, the operation is performed at the beginning of the file.

-l length

The length of the operation range in bytes. This option must always be specified if option **-d** is specified, and must be greater than 0.

The *size*, *offset* and *length* arguments may be suffixed with one of **K**, **M**, **G** or **T** (either upper or lower case) to indicate a multiple of Kilobytes, Megabytes, Gigabytes or Terabytes respectively.

Exactly one of the **-r**, **-s** and **-d** options must be specified.

If a file is made smaller, its extra data is lost. If a file is made larger, it will be extended as if by writing bytes with the value zero. If the file does not exist, it is created unless the **-c** option is specified.

Note that, while truncating a file causes space on disk to be freed, extending a file does not cause space to be allocated. To extend a file and actually allocate the space, it is necessary to explicitly write data to it, using (for example) the shell's '>>' redirection syntax, or `dd(1)`.

EXIT STATUS

The **truncate** utility exits 0 on success, and >0 if an error occurs. If the operation fails for an argument, **truncate** will issue a diagnostic and continue processing the remaining arguments.

EXAMPLES

Adjust the size of the file *test_file* to 10 Megabytes but do not create it if it does not exist:

```
truncate -c -s +10M test_file
```

Same as above but create the file if it does not exist:

```
truncate -s +10M test_file
ls -l test_file
-rw-r--r-- 1 root wheel 10485760 Jul 22 18:48 test_file
```

Adjust the size of *test_file* to the size of the kernel and create another file *test_file2* with the same size:

```
truncate -r /boot/kernel/kernel test_file test_file2
ls -l /boot/kernel/kernel test_file*
-r-xr-xr-x 1 root wheel 31352552 May 15 14:18 /boot/kernel/kernel*
-rw-r--r-- 1 root wheel 31352552 Jul 22 19:15 test_file
-rw-r--r-- 1 root wheel 31352552 Jul 22 19:15 test_file2
```

Downsize *test_file* in 5 Megabytes:

```
# truncate -s -5M test_file
ls -l test_file*
-rw-r--r-- 1 root wheel 26109672 Jul 22 19:17 test_file
```

```
-rw-r--r-- 1 root wheel 31352552 Jul 22 19:15 test_file2
```

SEE ALSO

dd(1), touch(1), fspacectl(2), truncate(2)

STANDARDS

The **truncate** utility conforms to no known standards.

HISTORY

The **truncate** utility first appeared in FreeBSD 4.2.

AUTHORS

The **truncate** utility was written by Sheldon Hearn <sheldonh@starjuice.net>. Hole-punching support of this utility was developed by Ka Ho Ng <khng@FreeBSD.org>.