

**NAME**

**tail** - display the last part of a file

**SYNOPSIS**

**tail** [-F | -f | -r] [-qv] [-b *number* | -c *number* | -n *number*] [*file* ...]

**DESCRIPTION**

The **tail** utility displays the contents of *file* or, by default, its standard input, to the standard output.

The display begins at a byte, line or 512-byte block location in the input. Numbers having a leading plus ('+') sign are relative to the beginning of the input, for example, "-c +2" starts the display at the second byte of the input. Numbers having a leading minus ('-') sign or no explicit sign are relative to the end of the input, for example, "-n 2" displays the last two lines of the input. The default starting location is "-n 10", or the last 10 lines of the input.

The options are as follows:

**-b** *number*, **--blocks=number**

The location is *number* 512-byte blocks.

**-c** *number*, **--bytes=number**

The location is *number* bytes.

**-f** The **-f** option causes **tail** to not stop when end of file is reached, but rather to wait for additional data to be appended to the input. The **-f** option is ignored if the standard input is a pipe, but not if it is a FIFO.

**-F** The **-F** option implies the **-f** option, but **tail** will also check to see if the file being followed has been renamed or rotated. The file is closed and reopened when **tail** detects that the filename being read from has a new inode number.

If the file being followed does not (yet) exist or if it is removed, tail will keep looking and will display the file from the beginning if and when it is created.

The **-F** option is the same as the **-f** option if reading from standard input rather than a file.

**-n** *number*, **--lines=number**

The location is *number* lines.

**-q**, **--quiet**, **--silent**

Suppresses printing of headers when multiple files are being examined.

**-r** The **-r** option causes the input to be displayed in reverse order, by line. Additionally, this option changes the meaning of the **-b**, **-c** and **-n** options. When the **-r** option is specified, these options specify the number of bytes, lines or 512-byte blocks to display, instead of the bytes, lines or blocks from the beginning or end of the input from which to begin the display. The default for the **-r** option is to display all of the input.

**-v, --verbose**

Prepend each file with a header.

If more than a single file is specified, or if the **-v** option is used, each file is preceded by a header consisting of the string "===> XXX <===" where XXX is the name of the file. The **-q** flag disables the printing of the header in all cases.

All *number* arguments may also be specified with size suffixes supported by `expand_number(3)`.

## EXIT STATUS

The **tail** utility exits 0 on success, and >0 if an error occurs.

## EXAMPLES

To display the last 500 lines of the file *foo*:

```
$ tail -n 500 foo
```

Keep */var/log/messages* open, displaying to the standard output anything appended to the file:

```
$ tail -F /var/log/messages
```

## SEE ALSO

`cat(1)`, `head(1)`, `sed(1)`, `expand_number(3)`

## STANDARDS

The **tail** utility is expected to be a superset of the IEEE Std 1003.2-1992 ("POSIX.2") specification. In particular, the **-F**, **-b** and **-r** options are extensions to that standard.

The historic command line syntax of **tail** is supported by this implementation. The only difference between this implementation and historic versions of **tail**, once the command line syntax translation has been done, is that the **-b**, **-c** and **-n** options modify the **-r** option, i.e., "**-r -c 4**" displays the last 4 characters of the last line of the input, while the historic `tail` (using the historic syntax "**-4cr**") would

ignore the **-c** option and display the last 4 lines of the input.

**HISTORY**

A **tail** command appeared in PWB UNIX.