

NAME

tac — concatenate reversed files

SYNOPSIS

tac [**-rb**] [**-s** *eparator*] [*file*]...

DESCRIPTION

Read each *file* (standard input stream if "-", the default), split it on the separator expression, matching from the end, and write it back out to the standard output stream, starting with the final match.

OPTIONS

-s, --separator=sep Separate by *sep* instead of a single newline. An empty separator matches nothing (and the invocation is equivalent to **cat**).
-r, --regex Treat separator as basic regular expression. An empty separator is refused.
-b, --before Write separator before its line.

EXIT STATUS

1 if a *file* couldn't be opened or read.

SEE ALSO

tail(1) **-r** is the portable and standard spelling, and isn't afflicted by the **BUGS**: prefer it instead of **tac** without **-rbs**.

cat(1), **rev**(1)

BUGS

Expects to map or read each *file* into main memory.

To minimise the impact of this, **tac** replaces itself with **tail -rq -- file...** whenever possible.

HISTORY

tail appeared in Version 7 AT&T UNIX, allowing up to one file, with an undocumented-in-the-manual **-r** mode, largely equivalent to present-day **tac**, but allowing the usual **lbc** specifiers for line, 512-byte block, and byte limits (with a global 4-kilobyte buffer for **-r** (and relative-to-EOF addressing it implied)).

3BSD removes **-r**.

4.2BSD re-adds **-r**, with broken interactions with **bc** specifiers.

4.3BSD bumps the buffer size to 32 kilobytes and fixes the **c** interaction to not affect the result.

4.4BSD fixes **bc** (**-bc**) interactions with **r** (**-r**), allows multiple files (with the usual **tail** headers between them), and removes buffer limitations.

AT&T System III UNIX removes **-r**.

AT&T System V Release 4 UNIX re-adds it, only allowing line limits.

As such, **tac** originates, fully formed, from GNU textutils at or before version 1.11, and persists in GNU coreutils; this implementation is compatible with the GNU system.

NetBSD 9.0 provides **tac** as a link to **tail**, implying **-r** with headings suppressed, quoting compatibility with the GNU system.