### **NAME**

col - filter reverse line feeds from input

#### **SYNOPSIS**

col options

## DESCRIPTION

**col** filters out reverse (and half–reverse) line feeds so the output is in the correct order, with only forward and half–forward line feeds. It also replaces any whitespace characters with tabs where possible. This can be useful in processing the output of **nroff**(1) and **tbl**(1).

col reads from standard input and writes to standard output.

## **OPTIONS**

### -b, --no-backspaces

Do not output any backspaces, printing only the last character written to each column position.

#### -f, --fine

Permit half-forward line feeds. Normally characters destined for a half-line boundary are printed on the following line.

## -h, --tabs

Output tabs instead of multiple spaces.

## -l, --lines number

Buffer at least *number* lines in memory. By default, 128 lines are buffered.

#### -p, --pass

Force unknown control sequences to be passed through unchanged. Normally **col** will filter out any control sequences other than those recognized and interpreted by itself, which are listed below.

## -x, --spaces

Output multiple spaces instead of tabs.

#### -h, --help

Display help text and exit.

## -V, --version

Print version and exit.

## **CONFORMING TO**

The **col** utility conforms to the Single UNIX Specification, Version 2. The **-l** option is an extension to the standard.

### **NOTES**

The control sequences for carriage motion that **col** understands and their decimal values are listed in the following table:

## ESC-7

reverse line feed (escape then 7)

## ESC-8

half reverse line feed (escape then 8)

## ESC-9

half forward line feed (escape then 9)

## backspace

moves back one column (8); ignored in the first column

#### newline

forward line feed (10); also does carriage return

## carriage return

(13)

#### shift in

shift to normal character set (15)

## shift out

shift to alternate character set (14)

## space

moves forward one column (32)

#### tab

moves forward to next tab stop (9)

## vertical tab

reverse line feed (11)

All unrecognized control characters and escape sequences are discarded.

**col** keeps track of the character set as characters are read and makes sure the character set is correct when they are output.

If the input attempts to back up to the last flushed line, col will display a warning message.

## **HISTORY**

A col command appeared in Version 6 AT&T UNIX.

# SEE ALSO

 $\pmb{expand}(1), \pmb{nroff}(1), \pmb{tbl}(1)$ 

# **REPORTING BUGS**

For bug reports, use the issue tracker at https://github.com/util-linux/util-linux/issues.

## **AVAILABILITY**

The **col** command is part of the util–linux package which can be downloaded from Linux Kernel Archive <a href="https://www.kernel.org/pub/linux/utils/util-linux/">https://www.kernel.org/pub/linux/utils/util-linux/</a>.