**NAME**

roff − format text

**SYNOPSIS**

**roff** [ +*n* ] [ −*n* ] [ −**s** ] [ −**h** ] file ...

**DESCRIPTION**

*Roff* formats text according to control lines embedded in the text in the given files. Encountering a nonexistent file terminates printing. Incoming interconsole messages are turned off during printing. The optional flag arguments mean:

+*n* Start printing at the first page with number *n*.

−*n* Stop printing at the first page numbered higher than *n*.

−**s** Stop before each page (including the first) to allow paper manipulation; resume on receipt of an interrupt signal.

−**h** Insert tabs in the output stream to replace spaces whenever appropriate.

Input consists of intermixed *text lines,* which contain information to be formatted, and *request lines,* which contain instructions about how to format it. Request lines begin with a distinguished *control character,* normally a period.

Output lines may be *filled* as nearly as possible with words without regard to input lineation. Line *breaks* may be caused at specified places by certain commands, or by the appearance of an empty input line or an input line beginning with a space.

The capabilities of *roff* are specified in the attached Request Summary. Numerical values are denoted there by n or +n, titles by t, and single characters by c. Numbers denoted +n may be signed + or −, in which case they signify relative changes to a quantity, otherwise they signify an absolute resetting. Missing n fields are ordinarily taken to be 1, missing t fields to be empty, and c fields to shut off the appropriate special interpretation.

Running titles usually appear at top and bottom of every page. They are set by requests like

.he ′part1′part2′part3′

Part1 is left justified, part2 is centered, and part3 is right justified on the page. Any % sign in a title is replaced by the current page number. Any nonblank may serve as a quote.

ASCII tab characters are replaced in the input by a *replacement character,* normally a space, according to the column settings given by a .ta command. (See .tr for how to convert this character on output.)

Automatic hyphenation of filled output is done under control of .hy. When a word contains a designated *hyphenation character,* that character disappears from the output and hyphens can be introduced into the word at the marked places only.

**FILES**

/usr/lib/suftab suffix hyphenation tables
/tmp/rtm? temporary

**SEE ALSO**

nroff (I), troff (I)

**BUGS**

*Roff* is the simplest of the runoff programs, but is utterly frozen.

REQUEST SUMMARY

| Request | Break | Initial | Meaning |
|---|---|---|---|
| .ad | yes | yes | Begin adjusting right margins. |
| .ar | no | arabic | Arabic page numbers. |
| .br | yes | - | Causes a line break − the filling of the current line is stopped. |
| .bl n | yes | - | Insert of n blank lines, on new page if necessary. |
| .bp +n | yes | n=1 | Begin new page and number it n; no n means '+1'. |
| .cc c | no | c=. | Control character becomes 'c'. |
| .ce n | yes | - | Center the next n input lines, without filling. |
| .de xx | no | - | Define parameterless macro to be invoked by request '.xx' (definition ends on line beginning '**..**'). |
| .ds | yes | no | Double space; same as '.ls 2'. |
| .ef t | no | t=´´´´ | Even foot title becomes t. |
| .eh t | no | t=´´´´ | Even head title becomes t. |
| .fi | yes | yes | Begin filling output lines. |
| .fo | no | t=´´´´ | All foot titles are t. |
| .hc c | no | none | Hyphenation character becomes 'c'. |
| .he t | no | t=´´´´ | All head titles are t. |
| .hx | no | - | Title lines are suppressed. |
| .hy n | no | n=1 | Hyphenation is done, if n=1; and is not done, if n=0. |
| .ig | no | - | Ignore input lines through a line beginning with '**..**'. |
| .in +n | yes | - | Indent n spaces from left margin. |
| .ix +n | no | - | Same as '.in' but without break. |
| .li n | no | - | Literal, treat next n lines as text. |
| .ll +n | no | n=65 | Line length including indent is n characters. |
| .ls +n | yes | n=1 | Line spacing set to n lines per output line. |
| .m1 n | no | n=2 | Put n blank lines between the top of page and head title. |
| .m2 n | no | n=2 | n blank lines put between head title and beginning of text on page. |
| .m3 n | no | n=1 | n blank lines put between end of text and foot title. |
| .m4 n | no | n=3 | n blank lines put between the foot title and the bottom of page. |
| .na | yes | no | Stop adjusting the right margin. |
| .ne n | no | - | Begin new page, if n output lines cannot fit on present page. |
| .nn +n | no | - | The next n output lines are not numbered. |
| .n1 | no | no | Add 5 to page offset; number lines in margin from 1 on each page. |
| .n2 n | no | no | Add 5 to page offset; number lines from n; stop if n=0. |
| .ni +n | no | n=0 | Line numbers are indented n. |
| .nf | yes | no | Stop filling output lines. |
| .nx filename | - | | Change to input file 'filename'. |
| .of t | no | t=´´´´ | Odd foot title becomes t. |
| .oh t | no | t=´´´´ | Odd head title becomes t. |
| .pa +n | yes | n=1 | Same as '.bp'. |
| .pl +n | no | n=66 | Total paper length taken to be n lines. |
| .po +n | no | n=0 | Page offset.  All lines are preceded by n spaces. |
| .ro | no | arabic | Roman page numbers. |
| .sk n | no | - | Produce n blank pages starting next page. |
| .sp n | yes | - | Insert block of n blank lines, except at top of page. |
| .ss | yes | yes | Single space output lines, equivalent to '.ls 1'. |
| .ta n n.. | | - | Pseudotab settings.  Initial tab settings are columns 9 17 25 ... |
| .tc c | no | space | Tab replacement character becomes 'c'. |
| .ti +n | yes | - | Temporarily indent next output line n spaces. |
| .tr cdef.. | no | - | Translate c into d, e into f, etc. |
| .ul n | no | - | Underline the letters and numbers in the next n input lines. |