## Name

groff\_man - compose manual pages with GNU roff

# **Synopsis**

```
groff –man [option ...] [file ...] groff –m man [option ...] [file ...]
```

## **Description**

The GNU implementation of the *man* macro package is part of the *groff* document formatting system. It is used to produce manual pages ("man pages") like the one you are reading.

This document presents the macros thematically; for those needing only a quick reference, the following table lists them alphabetically, with cross references to appropriate subsections below.

Man page authors and maintainers who are not already experienced *groff* users should consult *groff\_man\_style*(7), an expanded version of this document, for additional explanations and advice. It covers only those concepts required for man page document maintenance, and not the full breadth of the *groff* typesetting system.

Macro	Meaning	Subsection
.B	Bold	Font style macros
.BI	Bold, italic alternating	Font style macros
.BR	Bold, roman alternating	Font style macros
.EE	Example end	Document structure macros
.EX	Example begin	Document structure macros
.I	Italic	Font style macros
.IB	Italic, bold alternating	Font style macros
.IP	Indented paragraph	Paragraphing macros
.IR	Italic, roman alternating	Font style macros
.LP	Begin paragraph	Paragraphing macros
.ME	Mail-to end	Hyperlink macros
.MR	Man page cross reference	Hyperlink macros
.MT	Mail-to start	Hyperlink macros
<b>.</b> P	Begin paragraph	Paragraphing macros
.PP	Begin paragraph	Paragraphing macros
.RB	Roman, bold alternating	Font style macros
.RE	Relative inset end	Document structure macros
.RI	Roman, italic alternating	Font style macros
.RS	Relative inset start	Document structure macros
.SB	Small bold	Font style macros
.SH	Section heading	Document structure macros
.SM	Small	Font style macros
.SS	Subsection heading	Document structure macros
.SY	Synopsis start	Command synopsis macros
.TH	Title heading	Document structure macros
.TP	Tagged paragraph	Paragraphing macros
.TQ	Supplemental paragraph tag	Paragraphing macros
.UE	URI end	Hyperlink macros
.UR	URI start	Hyperlink macros
.YS	Synopsis end	Command synopsis macros

We discuss other macros (.AT, .DT, .HP, .OP, .PD, and .UC) in subsection "Deprecated features" below.

Throughout Unix documentation, a manual entry is referred to simply as a "man page", regardless of its length, without gendered implication, and irrespective of the macro package selected for its composition.

## Macro reference preliminaries

A tagged paragraph describes each macro. We present coupled pairs together, as with .EX and .EE.

An empty macro argument can be specified with a pair of double-quotes (""), but the *man* package is designed such that this should seldom be necessary. Most macro arguments will be formatted as text in the output; exceptions are noted.

#### **Document structure macros**

Document structure macros organize a man page's content. All of them break the output line. **.TH** (title heading) identifies the document as a man page and configures the page headers and footers. Section headings (**.SH**), one of which is mandatory and many of which are conventionally expected, facilitate location of material by the reader and aid the man page writer to discuss all essential aspects of the topic. Subsection headings (**.SS**) are optional and permit sections that grow long to develop in a controlled way. Many technical discussions benefit from examples; lengthy ones, especially those reflecting multiple lines of input to or output from the system, are usefully bracketed by **.EX** and **.EE**. When none of the foregoing meets a structural demand, use **.RS**/**.RE** to inset a region within a (sub)section.

## **.TH** topic section [footer-middle] [footer-inside] [header-middle]

Determine the contents of the page header and footer. The subject of the man page is *topic* and the section of the manual to which it belongs is *section*. See man(1) or intro(1) for the manual sectioning applicable to your system. topic and section are positioned together at the left and right in the header (with section in parentheses immediately appended to topic). footer-middle is centered in the footer. The arrangement of the rest of the footer depends on whether double-sided layout is enabled with the option  $-\mathbf{rD1}$ . When disabled (the default), footer-inside is positioned at the bottom left. Otherwise, footer-inside appears at the bottom left on recto (odd-numbered) pages, and at the bottom right on verso (even-numbered) pages. The outside footer is the page number, except in the continuous-rendering mode enabled by the option  $-\mathbf{rcR=1}$ , in which case it is the topic and section, as in the header. header-middle is centered in the header. If section is an integer between 1 and 9 (inclusive), there is no need to specify header-middle; an.tmac will supply text for it. The macro package may also abbreviate topic and footer-inside with ellipses if they would overrun the space available in the header and footer, respectively. For HTML output, headers and footers are suppressed.

Additionally, this macro breaks the page, resetting the number to 1 (unless the **-rC1** option is given). This feature is intended only for formatting multiple *man* documents in sequence.

A valid *man* document calls **.TH** once, early in the file, prior to any other macro calls.

# **.SH** [heading-text]

Set *heading-text* as a section heading. If no argument is given, a one-line input trap is planted; text on the next line becomes *heading-text*. The left margin is reset to zero to set the heading text in bold (or the font specified by the string **HF**), and, on typesetting devices, slightly larger than the base type size. If the heading font **\\*[HF]** is bold, use of an italic style in *heading-text* is mapped to the bold-italic style if available in the font family. The inset level is reset to 1, setting the left margin to the value of the **IN** register. Text after *heading-text* is set as an ordinary paragraph (**.P**).

The content of *heading-text* and ordering of sections follows a set of common practices, as has much of the layout of material within sections. For example, a section called "Name" or "NAME" must exist, must be the first section after the **.TH** call, and must contain only text of the form

topic[, another-topic]...\— summary-description

for a man page to be properly indexed. See *groff\_man\_style*(7) for suggestions and *man*(7) for the conventions prevailing on your system.

## **.SS** [subheading-text]

Set *subheading-text* as a subsection heading indented between a section heading and an ordinary paragraph (.P). If no argument is given, a one-line input trap is planted; text on the next line becomes *subheading-text*. The left margin is reset to the value of the **SN** register to set the heading text in bold (or the font specified by the string **HF**). If the heading font \\*[**HF**] is bold, use of an italic style in *subheading-text* is mapped to the bold-italic style if available in the font family. The

inset level is reset to 1, setting the left margin to the value of the **IN** register. Text after *subheading-text* is set as an ordinary paragraph (**.P**).

.EX

**.EE** Begin and end example. After **.EX**, filling is disabled and a constant-width (monospaced) font is selected. Calling **.EE** enables filling and restores the previous font.

These macros are extensions introduced in Ninth Edition Research Unix. Systems running that *troff*, or those from Documenter's Workbench, Heirloom Doctools, or Plan 9 *troff* support them. To be certain your page will be portable to systems that do not, copy their definitions from the *an-ext.tmac* file of a *groff* installation.

#### **.RS** [inset-amount]

Start a new relative inset level. The position of the left margin is saved, then moved right by *inset-amount*, if specified, and by the amount of the **IN** register otherwise. Calls to **.RS** can be nested; each increments by 1 the inset level used by **.RE**. The level prior to any **.RS** calls is 1.

.RE [level]

End a relative inset. The left margin corresponding to inset level *level* is restored. If no argument is given, the inset level is reduced by 1.

## Paragraphing macros

An ordinary paragraph (**.P**) is set without a first-line indentation at the current left margin. In man pages and other technical literature, definition lists are frequently encountered; these can be set as "tagged paragraphs", which have one (**.TP**) or more (**.TQ**) leading tags followed by a paragraph that has an additional indentation. The indented paragraph (**.IP**) macro is useful to continue the indented content of a narrative started with **.TP**, or to present an itemized or ordered list. All of these macros break the output line. If another paragraph macro has occurred since the previous **.SH** or **.SS**, they (except for **.TQ**) follow the break with a default amount of vertical space, which can be changed by the deprecated **.PD** macro; see subsection "Horizontal and vertical spacing" below. They also reset the type size and font style to defaults (**.TQ** again excepted); see subsection "Font style macros" below.

.P .LP

**.PP** Begin a new paragraph; these macros are synonymous. The indentation is reset to the default value; the left margin, as affected by **.RS** and **.RE**, is not.

### .TP [indentation]

Set a paragraph with a leading tag, and the remainder of the paragraph indented. A one-line input trap is planted; text on the next line, which can be formatted with a macro, becomes the tag, which is placed at the current left margin. The tag can be extended with the \c escape sequence. Subsequent text is indented by *indentation*, if specified, and by the amount of the IN register otherwise. If the tag is not as wide as the indentation, the paragraph starts on the same line as the tag, at the applicable indentation, and continues on the following lines. Otherwise, the descriptive part of the paragraph begins on the line following the tag.

.TQ Set an additional tag for a paragraph tagged with .TP. An input trap is planted as with .TP.

This macro is a GNU extension not defined on systems running AT&T, Plan 9, or Solaris *troff*; see *an–ext.tmac* in section "Files" below.

## **.IP** [tag] [indentation]

Set an indented paragraph with an optional tag. The *tag* and *indentation* arguments, if present, are handled as with **.TP**, with the exception that the *tag* argument to **.IP** cannot include a macro call.

### **Command synopsis macros**

**.SY** and **.YS** aid you to construct a command synopsis that has the classical Unix appearance. They break the output line.

These macros are GNU extensions not defined on systems running AT&T, Plan 9, or Solaris *troff*; see *an-ext.tmac* in section "Files" below.

#### .SY command

Begin synopsis. A new paragraph begins at the left margin unless **.SY** has already been called without a corresponding **.YS**, in which case only a break is performed. Adjustment and automatic hyphenation are disabled. *command* is set in bold. If a break is required, lines after the first are indented by the width of *command* plus a space.

**.YS** End synopsis. Indentation, adjustment, and hyphenation are restored to their previous states.

## Hyperlink macros

Man page cross references are best presented with .MR. Text may be hyperlinked to email addresses with .MT/.ME or other URIs with .UR/.UE. Hyperlinked text is supported on HTML and terminal output devices; terminals and pager programs must support ECMA-48 OSC 8 escape sequences (see *grotty*(1)). When device support is unavailable or disabled with the U register (see section "Options" below), .MT and .UR URIs are rendered between angle brackets after the linked text.

.MT, .ME, .UR, and .UE are GNU extensions not defined on systems running AT&T, Plan 9, or Solaris *troff*; see *an–ext.tmac* in section "Files" below. Plan 9 from User Space's *troff* implements .MR.

The arguments to .MR, .MT, and .UR should be prepared for typesetting since they can appear in the output. Use special character escape sequences to encode Unicode basic Latin characters where necessary, particularly the hyphen-minus. The formatter removes \: escape sequences from hyperlinks when supplying device control commands to output drivers.

## .MR topic manual-section [trailing-text]

(since groff 1.23) Set a man page cross reference as "topic(manual-section)". If trailing-text (typically punctuation) is specified, it follows the closing parenthesis without intervening space. Hyphenation is disabled while the cross reference is set. topic is set in the font specified by the MF string. The cross reference hyperlinks to a URI of the form "man:topic(manual-section)".

## .MT address

## .ME [trailing-text]

Identify address as an RFC 6068 addr-spec for a "mailto:" URI with the text between the two macro calls as the link text. An argument to .ME is placed after the link text without intervening space. address may not be visible in the rendered document if hyperlinks are enabled and supported by the output driver. If they are not, address is set in angle brackets after the link text and before trailing-text. If hyperlinking is enabled but there is no link text, address is formatted and hyperlinked without angle brackets.

#### .UR uri

#### .UE [trailing-text]

Identify *uri* as an RFC 3986 URI hyperlink with the text between the two macro calls as the link text. An argument to .UE is placed after the link text without intervening space. *uri* may not be visible in the rendered document if hyperlinks are enabled and supported by the output driver. If they are not, *uri* is set in angle brackets after the link text and before *trailing-text*. If hyperlinking is enabled but there is no link text, *uri* is formatted and hyperlinked *without* angle brackets.

The hyperlinking of .TP paragraph tags with .UR/.UE and .MT/.ME is not yet supported; if attempted, the hyperlink will be typeset at the beginning of the indented paragraph even on hyperlink-supporting devices.

## Font style macros

The *man* macro package is limited in its font styling options, offering only **bold** (.**B**), *italic* (.**I**), and roman. Italic text is usually set underscored instead on terminal devices. The .**SM** and .**SB** macros set text in roman or bold, respectively, at a smaller type size; these differ visually from regular-sized roman or bold text only on typesetting devices. It is often necessary to set text in different styles without intervening space. The macros .**BI**, .**BR**, .**IB**, .**IR**, .**RB**, and .**RI**, where "B", "T", and "R" indicate bold, italic, and roman, respectively, set their odd- and even-numbered arguments in alternating styles, with no space separating them.

The default type size and family for typesetting devices is 10-point Times, except on the **X75–12** and **X100–12** devices where the type size is 12 points. The default style is roman.

**.B** [*text*]

Set *text* in bold. If no argument is given, a one-line input trap is planted; text on the next line, which can be further formatted with a macro, is set in bold.

**.I** [text] Set text in an italic or oblique face. If no argument is given, a one-line input trap is planted; text on the next line, which can be further formatted with a macro, is set in an italic or oblique face.

.SM [text]

Set *text* one point smaller than the default type size on typesetting devices. If no argument is given, a one-line input trap is planted; text on the next line, which can be further formatted with a macro, is set smaller.

.SB [text]

Set *text* in bold and (on typesetting devices) one point smaller than the default type size. If no argument is given, a one-line input trap is planted; text on the next line, which can be further formatted with a macro, is set smaller and in bold. This macro is an extension introduced in SunOS 4.0.

Unlike the above font style macros, the font style alternation macros below set no input traps; they must be given arguments to have effect. Italic corrections are applied as appropriate.

.BI bold-text italic-text . . .

Set each argument in bold and italics, alternately.

.BR bold-text roman-text . . .

Set each argument in bold and roman, alternately.

.IB italic-text bold-text . . .

Set each argument in italics and bold, alternately.

.IR italic-text roman-text . . .

Set each argument in italics and roman, alternately.

.RB roman-text bold-text ...

Set each argument in roman and bold, alternately.

.RI roman-text italic-text . . .

Set each argument in roman and italics, alternately.

### Horizontal and vertical spacing

The *indentation* argument accepted by .IP, .TP, and the deprecated .HP is a number plus an optional scaling unit, as is .RS's *inset-amount*. If no scaling unit is given, the *man* package assumes "n". An indentation specified in a call to .IP, .TP, or the deprecated .HP persists until (1) another of these macros is called with an *indentation* argument, or (2) .SH, .SS, or .P or its synonyms is called; these clear the indentation entirely.

The left margin used by ordinary paragraphs set with .P (and its synonyms) not within an .RS/.RE relative inset is 7.2n for typesetting devices and 7n for terminal devices (but see the -rIN option). Headers, footers (both set with .TH), and section headings (.SH) are set at the page offset (see groff(7)) and subsection headings (.SS) indented from it by 3n (but see the -rSN option).

Several macros insert vertical space: **.SH**, **.SS**, **.TP**, **.P** (and its synonyms), **.IP**, and the deprecated **.HP**. The default inter-section and inter-paragraph spacing is 1v for terminal devices and 0.4v for typesetting devices. (The deprecated macro **.PD** can change this vertical spacing, but its use is discouraged.) Between **.EX** and **.EE** calls, the inter-paragraph spacing is 1v regardless of output device.

### Registers

Registers are described in section "Options" below. They can be set not only on the command line but in the site *man.local* file as well; see section "Files" below.

## **Strings**

The following strings are defined for use in man pages. None of these is necessary in a contemporary man page; see *groff\_man\_style*(7). Others are supported for configuration of rendering parameters; see section "Options" below.

- **\\*R** interpolates a special character escape sequence for the "registered sign" glyph, \(\( rg \), if available, and "(Reg.)" otherwise.
- **\\*S** interpolates an escape sequence setting the type size to the document default.

\\*(lq

- \\*(rq\) interpolate special character escape sequences for left and right double-quotation marks, \(\lambda\)(rq\), respectively.
- **\\*(Tm** interpolates a special character escape sequence for the "trade mark sign" glyph, \(tm, if available, and "(TM)" otherwise.

#### Hooks

Two macros, both GNU extensions, are called internally by the *groff man* package to format page headers and footers and can be redefined by the administrator in a site's *man.local* file (see section "Files" below). The presentation of **.TH** above describes the default headers and footers. Because these macros are hooks for *groff man* internals, man pages have no reason to call them. Such hook definitions will likely consist of ".sp" and ".tl" requests. They must also increase the page length with ".pl" requests in continuous rendering mode; **.PT** furthermore has the responsibility of emitting a PDF bookmark after writing the first page header in a document. Consult the existing implementations in *an.tmac* when drafting replacements.

- **.BT** Set the page footer text ("bottom trap").
- **.PT** Set the page header text ("page trap").

To remove a page header or footer entirely, define the appropriate macro as empty rather than deleting it.

### **Deprecated features**

Use of the following in man pages for public distribution is discouraged.

# .AT [system [release]]

Alter the footer for use with legacy AT&T man pages, overriding any definition of the *footer-in-side* argument to **.TH**. This macro exists only to render man pages from historical systems.

system can be any of the following.

- 3 7th edition (default)
- 4 System III
- 5 System V

The optional release argument specifies the release number, as in "System V Release 3".

**.DT** Reset tab stops to the default (every 0.5i).

Use of this presentation-oriented macro is deprecated. It translates poorly to HTML, under which exact space control and tabulation are not readily available. Thus, information or distinctions that you use tab stops to express are likely to be lost. If you feel tempted to change the tab stops such that calling this macro later is desirable to restore them, you should probably be composing a table using tbl(1) instead.

#### .HP [indentation]

Set up a paragraph with a hanging left indentation. The *indentation* argument, if present, is handled as with **.TP**.

Use of this presentation-oriented macro is deprecated. A hanging indentation cannot be expressed naturally under HTML, and non-*roff*-based man page interpreters may treat **.HP** as an ordinary paragraph. Thus, information or distinctions you mean to express with indentation may be lost.

# **.OP** option-name [option-argument]

Indicate an optional command parameter called *option-name*, which is set in bold. If the option takes an argument, specify *option-argument* using a noun, abbreviation, or hyphenated noun phrase. If present, *option-argument* is preceded by a space and set in italics. Square brackets in roman surround both arguments.

Use of this quasi-semantic macro, an extension originating in Documenter's Workbench *troff*, is deprecated. It cannot easily be used to annotate options that take optional arguments or options whose arguments have internal structure (such as a mixture of literal and variable components). One could work around these limitations with font selection escape sequences, but it is preferable to use font style alternation macros, which afford greater flexibility.

### **.PD** [vertical-space]

Define the vertical space between paragraphs or (sub)sections. The optional argument *vertical-space* specifies the amount; the default scaling unit is "v". Without an argument, the spacing is reset to its default value; see subsection "Horizontal and vertical spacing" above.

Use of this presentation-oriented macro is deprecated. It translates poorly to HTML, under which exact control of inter-paragraph spacing is not readily available. Thus, information or distinctions that you use **.PD** to express are likely to be lost.

## .UC [version]

Alter the footer for use with legacy BSD man pages, overriding any definition of the *footer-inside* argument to **.TH**. This macro exists only to render man pages from historical systems.

version can be any of the following.

- 3 3rd Berkeley Distribution (default)
- 4 4th Berkeley Distribution
- 5 4.2 Berkeley Distribution
- 6 4.3 Berkeley Distribution
- 7 4.4 Berkeley Distribution

## History

MDouglas McIlroy designed, implemented, and documented the AT&T man macros for Unix Version 7 (1979) and employed them to edit the first volume of its *Programmer's Manual*, a compilation of all man pages supplied by the system. That man supported the macros listed in this page not described as extensions, except .P and the deprecated .AT and .UC. The only strings defined were R and S; no registers were documented.

.UC appeared in 3BSD (1980). Unix System III (1980) introduced .P and exposed the registers IN and LL, which had been internal to Seventh Edition Unix *man*. PWB/UNIX 2.0 (1980) added the Tm string. 4BSD (1980) added lq and rq strings. SunOS 2.0 (1985) recognized C, D, P, and X registers. 4.3BSD (1986) added .AT and .P. Ninth Edition Research Unix (1986) introduced .EX and .EE. SunOS 4.0 (1988) added .SB.

The foregoing features were what James Clark implemented in early versions of *groff*. Later, *groff* 1.20 (2009) originated **.SY/.YS**, **.TQ**, **.MT/.ME**, and **.UR/.UE**. Plan 9 from User Space's *troff* introduced **.MR** in 2020.

## **Options**

The following *groff* options set registers (with  $-\mathbf{r}$ ) and strings (with  $-\mathbf{d}$ ) recognized and used by the *man* macro package. To ensure rendering consistent with output device capabilities and reader preferences, man pages should never manipulate them.

## -dAD=adjustment-mode

Set line adjustment to *adjustment-mode*, which is typically "**b**" for adjustment to both margins (the default), or "I" for left alignment (ragged right margin). Any valid argument to *groff* 's ".ad" request may be used. See *groff* (7) for less-common choices.

#### -rcR=1

Enable continuous rendering. Output is not paginated; instead, one (potentially very long) page is produced. This is the default for terminal and HTML devices. Use **-rcR=0** to disable it on terminal devices; on HTML devices, it cannot be disabled.

**-rC1** Number output pages consecutively, in strictly increasing sequence, rather than resetting the page number to 1 (or the value of register **P**) with each new *man* document.

#### -rCS=1

Set section headings (the argument(s) to **.SH**) in full capitals. This transformation is off by default because it discards case distinction information.

#### -rCT=1

Set the man page topic (the first argument to **.TH**) in full capitals in headers and footers. This transformation is off by default because it discards case distinction information.

**-rD1** Enable double-sided layout, formatting footers for even and odd pages differently; see the description of **.TH** in subsection "Document structure macros" above.

### **-rFT**= footer-distance

Set distance of the footer relative to the bottom of the page to *footer-distance*; this amount is always negative. At one half-inch above this location, the page text is broken before writing the footer. Ignored if continuous rendering is enabled. The default is -0.5i.

## -dHF=heading-font

Set the font used for section and subsection headings; the default is "**B**" (bold style of the default family). Any valid argument to groff's ".ft" request may be used. See groff(7).

#### -rHY=0

Disable automatic hyphenation. Normally, it is enabled (1). The hyphenation mode is determined by the *groff* locale; see section "Localization" of *groff* (7).

## -rIN=standard-indentation

Set the amount of indentation used for ordinary paragraphs (**.P** and its synonyms) and the default indentation amount used by **.IP**, **.RS**, **.TP**, and the deprecated **.HP**. See subsection "Horizontal and vertical spacing" above for the default. For terminal devices, *standard-indentation* should always be an integer multiple of unit "n" to get consistent indentation.

## -rLL=line-length

Set line length; the default is 78n for terminal devices and 6.5i for typesetting devices.

## -rLT=title-length

Set the line length for titles. By default, it is set to the line length (see **-rLL** above).

### **-dMF**=*man-page-topic-font*

Set the font used for man page topics named in **.TH** and **.MR** calls; the default is "**I**" (italic style of the default family). Any valid argument to *groff* 's ".ft" request may be used. If the **MF** string ends in "I", it is assumed to be an oblique typeface, and italic corrections are applied before and after man page topics.

 $-\mathbf{rP}n$  Start enumeration of pages at n. The default is 1.

# -rStype-size

Use *type-size* for the document's body text; acceptable values are 10, 11, or 12 points. See subsection "Font style macros" above for the default.

## **-rSN**=*subsection*-*indentation*

Set indentation of subsection headings to *subsection-indentation*. See subsection "Horizontal and vertical spacing" above for the default.

- **-rU1** Enable generation of URI hyperlinks in the *grohtml* and *grotty* output drivers. *grohtml* enables them by default; *grotty* does not, pending more widespread pager support for OSC 8 escape sequences. Use **-rU0** to disable hyperlinks; this will make the arguments to **MT** and **UR** calls visible in the document text produced by link-capable drivers.
- $-\mathbf{r}\mathbf{X}p$  Number successors of page p as pa, pb, pc, and so forth. The register tracking the suffixed page letter uses format "a" (see the ".af" request in groff(7)).

#### **Files**

/usr/share/groff/1.23.0/tmac/an.tmac

Most *man* macros are defined in this file. It also loads extensions from *an–ext.tmac* (see below).

/usr/share/groff/1.23.0/tmac/andoc.tmac

This brief *groff* program detects whether the *man* or *mdoc* macro package is being used by a document and loads the correct macro definitions, taking advantage of the fact that pages using them must call **.TH** or **.Dd**, respectively, before any other macros. A *man* program or user typing, for example, "**groff -mandoc page.1**", need not know which package the file *page.1* uses. Multiple man pages, in either format, can be handled; *andoc* reloads each macro package as necessary.

/usr/share/groff/1.23.0/tmac/an-ext.tmac

Except for .SB, definitions of macros described above as extensions are contained in this file; in some cases, they are simpler versions of definitions appearing in *an.tmac*, and are ignored if the formatter is GNU *troff*. They are written to be compatible with AT&T *troff* and permissively licensed—not copylefted. To reduce the risk of name space collisions, string and register names begin only with "m". We encourage man page authors who are concerned about portability to legacy Unix systems to copy these definitions into their pages, and maintainers of *troff* implementations or work-alike systems that format man pages to re-use them.

The definitions for these macros are read after a page calls **.TH**, so they will replace any macros of the same names preceding it in your file. If you use your own implementations of these macros, they must be defined after **.TH** is called to have any effect. Furthermore, it is wise to define such page-local macros (if at all) after the "Name" section to accommodate timid *makewhatis* or *mandb* implementations that may give up their scan for indexing material early.

/usr/share/groff/1.23.0/tmac/man.tmac

This is a wrapper that loads an.tmac.

/usr/share/groff/1.23.0/tmac/mandoc.tmac

This is a wrapper that loads *andoc.tmac*.

/usr/share/groff/site-tmac/man.local

Put site-local changes and customizations into this file.

# Authors

The initial GNU implementation of the *man* macro package was written by James Clark. Later, Werner Lemberg supplied the S, LT, and cR registers, the last a 4.3BSD-Reno mdoc(7) feature. Larry Kollar added the FT, HY, and SN registers; the HF string; and the PT and BT macros. GBranden Robinson implemented the AD and MF strings; CS, CT, and U registers; and the MR macro. Except for .SB, the extension macros were written by Lemberg, Eric SRaymond, and Robinson.

This document was originally written for the Debian GNU/Linux system by Susan GKleinmann. It was corrected and updated by Lemberg and Robinson. The extension macros were documented by Raymond and Robinson.

## See also

tbl(1), eqn(1), and refer(1) are preprocessors used with man pages. man(1) describes the man page librarian on your system.  $groff\_mdoc(7)$  details the groff version of the BSD-originated alternative macro package for man pages.

 $\textit{groff\_man\_style}(7),\,\textit{groff}(7),\,\textit{groff\_char}(7),\,\textit{man}(7)$