

**Name**

groff\_www – GNU *roff* macros for authoring web pages

**Synopsis**

**groff -m www** [*option* ...] [*file* ...]

**Description**

This manual page describes the GNU *www* macro package, which is part of the *groff*(7) document formatting system. This macro file is automatically loaded by the default *troffrc* file when the formatter (usually *groff*(1)) is called with either of the options **-Thtml** or **-Txhtml**. To see hyperlinks in action, format this man page using one of those options.

This document is a basic guide; the HTML output driver (*grohtml*) remains in an alpha state. It has been included with the distribution to encourage testing.

Here is a summary of the functions found in this macro set.

.JOBNAME	split output into multiple files
.HX	automatic heading level cut off
.BCL	specify colours on a web page
.BGIMG	specify background image
.URL	create a URL using two parameters
.FTP	create an FTP reference
.MTO	create an HTML email address
.TAG	generate an HTML name
.IMG	include an image file
.PIMG	include PNG image
.MPIMG	place PNG on the margin and wrap text around it
.HnS	begin heading
.HnE	end heading
.LK	emit automatically collected links.
.HR	produce a horizontal rule
.NHR	suppress automatic generation of rules.
.HTL	only generate HTML title
.HEAD	add data to <head> block
.ULS	unordered list begin
.ULE	unordered list end
.OLS	ordered list begin
.OLE	ordered list end
.DLS	definition list begin
.DLE	definition list end
.LI	insert a list item
.DC	generate a drop capital
.HTML	pass an HTML raw request to the device driver
.CDS	code example begin
.CDE	code example end
.ALN	place links on left of main text.
.LNS	start a new two-column table with links in the left.
.LNE	end the two-column table.
.LINKSTYLE	initialize default URL attributes.

**Macros****.JOBNAME filename**

Split output into multiple HTML files. A file is split whenever a .SH or .NH 1 is encountered. Its argument is the file stem name for future output files. This option is equivalent to *grohtml*'s **-j** option.

**.HX n** Specify the cut off depth when generating links from section headings. For example, a parameter of 2 would cause *grohtml* to generate a list of links for **.NH 1** and **.NH 2** but not for **.NH 3**. Whereas

```
.HX 0
```

tells *grohtml* that no heading links should be created at all. Another method for turning automatic headings off is by issuing the command-line switch **-P-I** to *groff*.

**.BCL foreground background active not-visited visited**

This macro takes five parameters: foreground, background, active hypertext link, hypertext link not yet visited, and visited hypertext link colour.

**.BGIMG imagefile**

the only parameter to this macro is the background image file.

**.URL url [description] [after]**

generates a URL using either one, two, or three arguments. The first parameter is the actual URL, the second is the name of the link, and the third is optional stuff to be printed immediately afterwards. If **description** and **after** are absent then the **URL** becomes the anchor text. Hyphenation is disabled while printing the actual URL; explicit breakpoints should be inserted with the `\:` escape sequence. Here is how to encode `foo <http://foo.org>`:

```
.URL http://foo.org/ foo :
```

If this is processed by a device other than **-Thtml** or **-Txhtml** it appears as:

```
foo <http://foo.org>
```

The URL macro can be of any type; for example, we can reference Eric Raymond's *pic* guide `<pic.html>` by:

```
.URL pic.html "Eric Raymond's pic guide"
```

**.MTO address [description] [after]**

Generate an email HTML reference. The first argument is mandatory as the email address. The optional second argument is the text you see in your browser. If an empty argument is given, **address** is used instead. An optional third argument is stuff printed immediately afterwards. Hyphenation is disabled while printing the actual email address. For example, Joe User `<joe@user.org>` can be achieved by the following macro:

```
.MTO joe@user.org "Joe User"
```

All URLs currently are treated as consuming no textual space in *groff*. This could be considered as a bug since it causes some problems. To circumvent this, **www.tmac** inserts a zero-width character which expands to a harmless space (only if run with **-Thtml** or **-Txhtml**).

**.FTP url [description] [after]**

indicates that data can be obtained via FTP. The first argument is the URL and the second is the browser text. A third argument, similar to the macros above, is intended for stuff printed immediately afterwards. The second and the third parameter are optional. Hyphenation is disabled while printing the actual URL. As an example, here is the location of the GNU FTP server `<ftp://ftp.gnu.org>`. The macro example above can be specified as:

```
.FTP ftp://ftp.gnu.org/ "GNU FTP server" .
```

**.TAG name**

Generates an HTML name tag from its argument. This can then be referenced using the URL `<#URL>` macro. As you can see, you must precede the tag name with `#` since it is a local reference. This link was achieved via placing a TAG in the URL description above; the source looks like this:

```
.TP
.B URL
generates
.TAG URL
```

a URL using either two or three arguments.  
 . . .

**.IMG [-R|-L|-C] filename [width] [height]**

Include a picture into the document. The first argument is the horizontal location: right, left, or center (**-R**, **-L**, or **-C**). Alignment is centered by default (**-C**). The second argument is the filename. The optional third and fourth arguments are the width and height. If the width is absent it defaults to 1 inch. If the height is absent it defaults to the width. This maps onto an HTML `img` tag. If you are including a PNG image then it is advisable to use the **PIMG** macro.

**.PIMG [-R|-L|-C] filename [width] [height]**

Include an image in PNG format. This macro takes exactly the same parameters as the **IMG** macro; it has the advantage of working with PostScript and HTML devices also since it can automatically convert the image into the EPS format, using the following programs of the **netpbm** package: **pngtopnm**, **pnmcrop**, and **pnmtops**. If the document isn't processed with **-Thtml** or **-Txhtml** it is necessary to use the **-U** option of *groff*.

**.MPIMG [-R|-L] [-G gap] filename [width] [height]**

Place a PNG image on the margin and wrap text around it. The first parameters are optional. The alignment: left or right (**-L** or **-R**) specifies the margin where the picture is placed at. The default alignment is left (**-L**). Optionally, **-G gap** can be used to arrange a gap between the picture and the text that wraps around it. The default gap width is zero.

The first non-optional argument is the filename. The optional following arguments are the width and height. If the width is absent it defaults to 1 inch. If the height is absent it defaults to the width. Example:

```
.MPIMG -L -G 2c foo.png 3c 1.5c
```

The height and width may also be given as percentages. The PostScript device calculates the width from the **.J** register and the height from the **.p** register. For example:

```
.MPIMG -L -G 2c foo.png 15%
```

**.HnS n** Begin heading. The numeric heading level *n* is specified by the first parameter. Use this macro if your headings contain URL, FTP or MTO macros. Example:

```
.HnS 1
.HR
GNU Troff
.URL https://\:www\:.gnu\:.org/\:software/\:groff/
\[em]a
.URL http://www\:.gnu\:.org/ GNU
project.
.HR
.HnE
```

In this case you might wish to disable automatic links to headings. This can be done via **-P-I** from the command line.

**.HnE** End heading.

**.LK** Force *grohtml* to place the automatically generated links at this position.

**.HR** Generate a full-width horizontal rule for **-Thtml** and **-Txhtml**. No effect for all other devices.

**.NHR** Suppress generation of the top and bottom rules which *grohtml* emits by default.

**.HTL** Generate an HTML title only. This differs from the **TL** macro of the **ms** macro package which generates both an HTML title and an `<H1>` heading. Use it to provide an HTML title as search engine fodder but a graphic title in the document. The macro terminates when a space or break is seen (`.sp`, `.br`).

**.HEAD**

Add arbitrary HTML data to the <head> block. Ignored if not processed with **-Thtml** or **-Txhtml**. Example:

```
.HEAD "<link \
      rel="icon" \
      type="image/png" \
      href="http://foo.org/bar.png"/>"
```

**.HTML**

All text after this macro is treated as raw HTML. If the document is processed without **-Thtml** or **-Txhtml** then the macro is ignored. Internally, this macro is used as a building block for other higher-level macros.

For example, the **BGIMG** macro is defined as

```
.de BGIMG
. HTML <body background=\\$1>
..
```

**.DC I text [color]**

Produce a drop capital. The first parameter is the letter to be dropped and enlarged, the second parameter **text** is the adjoining text whose height the first letter should not exceed. The optional third parameter is the color of the dropped letter. It defaults to black.

**.CDS** Start displaying a code section in constant width font.

**.CDE** End code display

**.ALN [color] [percentage]**

Place section heading links automatically to the left of the main text. The color argument is optional and if present indicates which HTML background color is to be used under the links. The optional percentage indicates the amount of width to devote to displaying the links. The default values are #eeeeee and 30 for color and percentage width, respectively. This macro should only be called once at the beginning of the document. After calling this macro each section heading emits an HTML table consisting of the links in the left and the section text on the right.

**.LNS** Start a new two-column table with links in the left column. This can be called if the document has text before the first **.SH** and if **.ALN** is used. Typically this is called just before the first paragraph and after the main title as it indicates that text after this point should be positioned to the right of the left-hand navigational links.

**.LNE** End a two-column table. This should be called at the end of the document if **.ALN** was used.

**.LINKSTYLE color [ fontstyle [ openglyph closeglyph ] ]**

Initialize default URL attributes to be used if this macro set is not used with the HTML device. The macro set initializes itself with the following call

```
.LINKSTYLE blue CR \[la] \[ra]
```

but these values will be superseded by a user call to **LINKSTYLE**.

**Section heading links**

By default *grohtml* generates links to all section headings and places these at the top of the HTML document. (See **LINKS** <#LK> for details of how to switch this off or alter the position).

**Limitations of grohtml**

*tbl*(1) tables are rendered as PNG images. Paul DuBois's approach with *tblcvt*(1), part of the *troffcvt* distribution (<http://www.snake.net/software/troffcvt/>), should be explored.

**Files**

*/usr/local/share/groff/1.23.0/tmac/www.tmac*

**Authors**

The *www* macro package was written by Gaius Mulley <gaius@glam.ac.uk>, with additions by Werner Lemberg <wl@gnu.org> and Bernd Warken <groff-bernd.warken-72@web.de>.

**See also**

*groff(1)*, *troff(1)*, *grohtml(1)*, *netpbm(1)*