

**NAME**

Latex2man is a tool to translate UNIX manual pages written with LaTeX into a format understood by the UNIX *man(1)*-command. Alternatively HTML, TexInfo, or LaTeX code can be produced too. Output of parts of the text may be suppressed using the conditional text feature (for this, LaTeX generation may be used).

**SYNOPSIS**

```
latex2man [-ttransfile] [-cCSSfile] [-HMTL] [-h] [-V] [-Cname] [-achar] infile outfile
```

**DESCRIPTION**

Latex2man reads the file *infile* and writes *outfile*. The input must be a LaTeX document using the latex2man LaTeX package. Latex2man translates that document into the *troff(1)* format using the **-man** macro package.

Using the **-H** option, HTML code can be produced, instead of *troff(1)*. With this option you can, optionally, specify a *CSSfile* as an argument. CSS (Cascading Style Sheets) allows you to control the appearance of the resulting HTML page. See below for the names of CSS classes that are included in the HTML tags as attributes.

Using the **-T** option, TexInfo code can be produced, instead of *troff(1)*.

Using the **-M** option, *troff(1)* input is produced.

Using the **-L** option, LaTeX output can be produced, instead of *troff(1)*.

**OPTIONS**

**-ttransfile**

Translation for user defined LaTeX macros.

**-cCSSfile**

If you use the **-H** you can also specify a file that contains CSS style sheets. The link to the CSS file is inserted into the generated HTML output using the specified *CSSfile* filename.

**-M**

Produce output suitable for the *man(1)* command (default).

**-H**

Instead of producing output suitable for the *man(1)* command, HTML code is produced (despite the name of the command).

**-T**

Instead of producing output suitable for the *man(1)* command, TexInfo code is produced (despite the name of the command). The generated .texi-file may be processed with *makeinfo(1)* (to produce an .info-file) which in turn may be installed using *install-info(1)*. The Info tags @dircategory and @direntry are provided.

**-L**

The LaTeX source is written to the *outfile*. This is useful in conjunction with the **-Cname** option.

**-Cname**

Output the conditional text for *name*. If more than one name should be given use quotes: **-C'name1 name2 ...'**

The following names are defined automatically:

- \* **-H** defines HTML
- \* **-T** defines TEXI
- \* **-M** defines MAN
- \* **-L** defines LATEX

**-a***char*

Is used only in conjunction with **-T**.

Background:

TeXInfo ignores all blanks before the first word on a new line. In order to produce some additional space before that word (using `\SP`) some character has to be printed before the additional space. By default this is a `.` (dot). The *char* specifies an alternative for that first character. Giving a blank to **-a** suppresses the indentation of a line.

Note: only for the first `\SP` of a series that *char* is printed.

**-h**

Show a help text.

**-v**

Show version information.

**FILES**

`latex2man.tex`

The LaTeX file containing this Man–page.

`latex2man.sty`

The LaTeX package defining the environments and commands.

`latex2man.cfg`

The configuration file for Latex2man LaTeX–package.

`latex2man.css`

File containing example CSS definitions.

`latex2man.trans`

File containing example translations of user defined LaTeX macros.

`fancyheadings.sty`

A LaTeX package used to typeset head– and foot lines.

`fancyhdr.sty`

A LaTeX package used to typeset head– and foot lines.

`rcsinfo.sty`

A LaTeX package used to extract and use RCS version control information in LaTeX documents.

**`latex2man.pdf`**

The PDF version of this document.

**SEE ALSO**

LaTeX, TexInfo, *troff*(1), *groff*(1), *makeinfo*(1).

**LaTeX COMMANDS**

The LaTeX package `latex2man` is used to write the Man–pages with LaTeX. Since we translate into other text formats, not all LaTeX stuff can be translated.

**PACKAGE OPTIONS**

The latex2man package accepts the following options:

`fancy` use the LaTeX package fancyheadings.

`fancyhdr`  
use the LaTeX package fancyhdr.

`nofancy`  
neither the LaTeX package fancyheadings nor fancyhdr are used.

The default option may be specified in the file latex2man.cfg.

**PACKAGE SPECIFIC ENVIRONMENTS**

The following environments are provided by the package:

`\begin{Name}{chapter}{name}{author}{info}{title}`

The Name environment takes five arguments: 1. the Man–page chapter, 2. the name of the Man–page, 3. the author, 4. some short information about the tool printed in the footline of the Man–page, and 5. a text which is used as title, for HTML and LaTeX (it's ignored for output of the Man–page or TeXinfo. The Name environment must be the first environment in the document. Processing starts with this environment. Any text before this is ignored (exception: the `setVersion` and `setDate` commands). (Note: all arguments of `\begin{Name}` must be written on one line).

`\begin{Table}[width]{columns}`

The Table environment takes two arguments: the first optional one specifies a width of the last column, the second one gives the number of columns. For example:

```
\begin{Table}[2cm]{3}
Here & am & I \\ \hline
A 1 & A 2 & A 3 1 2 3 4 5 A 3 1 2 3 4 5 \\
B 1 & B 2 & B 3 \\
\end{Table}
```

will be typeset as:

Here	am	I
A 1	A 2	A 3 1 2 3 4 5 A 3 1 2 3 4 5
B 1	B 2	B 3

If no optional *width* argument is given, all entries are typeset left justified. The *width* is a length measured absolutely in *cm*. Processing with LaTeX a `p{width}` column is typeset as last column. The translation to *troff*(1) commands results in a `lw(width)` column specification. Translating to HTML and TexInfo ignores the *width* parameter.

`\hline` may be used.

If the Man–page is formatted with *troff*(1) and tables are used, the *tbl*(1) preprocessor should be called, usually by giving a `-t` to the call of *troff*(1). When viewing the generated manula page using *man*(1), *tbl*(1) is called automatically.

`\begin{Description}`

is the same as `\begin{description}`

`\begin{Description}[label]`

is similar to `\begin{description}`, but the item labels have at minimum the size of the (optional) word *label*. The difference is visible only in the DVI and PDF-output, not in the troff, TexInfo or HTML output.

a       |a `\begin{description}`

ab       |ab

abc      |abc

a       |a `\begin{Description}`

ab       |ab

abc      |abc

a       |a `\begin{Description}[aa]`

ab       |ab

abc      |abc

### ACCEPTED LaTeX ENVIRONMENTS

The following environments are accepted:

- \*       description
- \*       enumerate
- \*       itemize
- \*       verbatim
- \*       center

They may be nested:

- \*       Itemize and nested center:

A centered line.

Another centered line.

- \*       Another item an nested enumerate

1.       a

2.       b

### PACKAGE SPECIFIC MACROS

The following commands are provided:

`\Opt{option}`

Option: `\Opt{-o}` will be typeset as `-o`.

`\Arg{argument}`

Argument: `\Arg{filename}` will be typeset as *filename*.

`\OptArg{option}{argument}`  
Option with Argument:  
`\OptArg{-o}{filename}` will be typeset as `-ofilename`.

`\OptoArg{option}{argument}`  
Option with optional Argument:  
`\OptoArg{-o}{filename}` will be typeset as `-o[filename]`.

`\oOpt{option}`  
Optional option, e.g. `\oOpt{-o}` will be typeset as `[-o]`.

`\oArg{argument}`  
Optional argument, e.g. `\oArg{filename}` will be typeset as `[filename]`.

`\oOptArg{option}{argument}`  
Optional option with argument, e.g.  
`\oOptArg{-o}{filename}` will be typeset as `[-ofilename]`.

`\oOptoArg{option}{argument}`  
Optional option with optional argument, e.g.  
`\oOptoArg{-o}{filename}` will be typeset as `[-o[filename]]`.

`\File{filename}`  
used to typeset filenames, e.g. `\File{filename}` will be typeset as `filename`.

`\Prog{prog}`  
used to typeset program names, e.g. `\Prog{latex2man}` will be typeset as `latex2man`.

`\Cmd{command}{chapter}`  
used to typeset references to other commands, e.g.  
`\Cmd{latex2man}{1}` will be typeset as `latex2man(1)`.

`\Bar` is typeset as `|`.

`\Bs` (BackSlash) is typeset as `\`.

`\Tilde` is typeset as `~`.

`\Dots` is typeset as `...`

`\Bullet` is typeset as `*`.

`\setVersion{..}`  
set `..` as version information.

`\setVersionWord{..}`  
set `..` for the word *Version:* in the footline.  
The default is `\setVersionWord{Version:}`.

`\Version`  
returns the version information.

`\setDate{..}`  
sets `..` as date information.

`\Date` returns the date information.

`\Email{..}`

use to mark an Email address:

`\Email{Juergen.Vollmer@informatik-vollmer.de}` is typeset as:

**Juergen.Vollmer@informatik-vollmer.de.**

`\URL{..}`

use to mark an URL: `\URL{http://www.foo.de/Tilde vollmer}` is typeset as

**http://www.foo.de/~vollmer.**

`\LatexManEnd`

the input file is read and processed until reading end-of-file or

`\LatexManEnd` (at the beginning of a line). LaTeX ignores this command.

`\Lbr, \Rbr`

is typeset as [ and ] (these variants are needed only sometimes like in

`\item[FooBar\Lbr xx \Lbr]`. Usually [ ] will work.

`\LBr, \RBr`

is typeset as { and } (these variants are needed when using { or } as arguments to macros.

`\Circum`

is typeset as ^.

`\Percent`

is typeset as %.

`\TEXbr` If processed with LaTeX causes a linebreak (i.e. is equivalent to `\`). In the output of latex2man this macro is ignored.

`\TEXIbr`

If TexInfo output is generated, causes a linebreak (i.e. is equivalent to `\`), otherwise ignored.

`\MANbr`

If Man-Page output is generated, causes a linebreak (i.e. is equivalent to `\`), otherwise ignored.

`\HTMLbr`

If HTML output is generated, causes a linebreak (i.e. is equivalent to `\`), otherwise ignored.

`\medskip`

An empty line.

`\SP`

Produces some extra space, works also at the beginning of lines. The code of the second line looks like: `\SP abc \SP\SP xx\`:

abc xx

abc xx

abc xx

Note: Due to some “problems” with TexInfo, the lines starting with `\SP` have a leading . (dot) in the TexInfo output, see `-a $\textit{char}$` .

## ACCEPTED MACROS FROM THE RCSINFO PACKAGE

`\rcsInfo $Id ...$`  
 if the LaTeX package rcsinfo is used, this command is used to extract the date of the Man–page.

`\rcsInfoLongDate`  
 if the LaTeX package rcsinfo is used, this command is used to typeset the date coded in the `$Id ..$` string.

### ACCEPTED LaTeX MACROS

The following standard LaTeX commands are accepted:

`\section{..}`  
 The section macro takes one argument: the name of the Man–page section. Each Man–page consists of several sections. Usually there are the following sections in a Man–page: *Name* (special handling as environment, c.f. above), *Synopsis*, *Description*, *Options*, *Files*, *See Also*, *Diagnostics*, *Return Values*, *Bugs*, *Author*, *version*, etc.

*Synopsis* must be the first section after the Name environment.

Note: Do not use LaTeX–macros in section names.

`\subsection{..}`  
 works as well as

`\subsubsection{..}`  
 those.

`\emph{..}`  
`\emph{example}` is typeset as *example*.

`\textbf{..}`  
`\textbf{example}` is typeset as **example**.

`\texttt{..}`  
`\texttt{example}` is typeset as `example`.

`\underline{..}`  
`\underline{example}` is typeset as *example of underline* .

`\date{..}`  
 uses .. as date.

`\verb+..+`  
 but only + is allowed as delimiter.

`$<$` is typeset as `<`.

`$>$` is typeset as `>`.

`$<=$` is typeset as `<=`.

`$>=$` is typeset as `>=`.

`$=$` is typeset as `=`.

`$<>$` is typeset as `<>` .

`$\ge$` is typeset as `$>=$`.

`$\le$` is typeset as `$<=$`.

`\leftarrow`

is typeset as  $\leftarrow$ .

`\Leftarrow`

is typeset as  $\Leftarrow$ .

`\rightarrow`

is typeset as  $\rightarrow$ .

`\Rrightarrow`

is typeset as  $\Rrightarrow$ .

`\{` is typeset as  $\{$ .

`\}` is typeset as  $\}$ .

`\$` is typeset as  $\$$ .

`\$` is typeset as  $\$$ , should be used inside macro arguments.

`\_` is typeset as  $\_$ .

`\&` is typeset as  $\&$ .

`\#` is typeset as  $\#$ .

`\%` is typeset as  $\%$ .

`\,` is typeset as smaller blank  $\,$  (between the two  $\,$ )

`\-` is used to mark hyphenation in a word.

`\\` is typeset as a linebreak or marks the end of a column in the Table environment.

`\` (a `\` followed by a blank) is typeset as a blank, although it cannot be used at the beginning of a line to make indentation (see the `\SP` command).

`~` is typeset as a blank.

`\copyright`

is typeset as (C).

`\noindent`

`\hline` inside a Table environment.

`\item` inside a `itemize`, `enumerate`, or `description` environment.

`\today` 22 December 2010 (see also the `rcsinfo` LaTeX package).

`\ss, \a, ...`

`\ss = ß, \a = ä, \o = ö, \u = ü, \A = Ä, \O = Ö, \U = Ü`. It is allowed to surround these macros in `{` and `}` in all places, even inside other macros, e.g.

```
\textbf{\a\o\u\A\O\U\ss}
```

```
\textbf{\a}{\o}{\u}{\A}{\O}{\U}{\ss}
```

```
\textbf{äöüÄÖÜß}
```

**äöüÄÖÜß äöüÄÖÜß äöüÄÖÜß**



If these letters are used in their LATIN-1 8-bit coding, they are translated into the equivalent letter of the desired output format. E.g. Å becomes &Auml; in HTML and @"A in texinfo.

### CONDITIONAL TEXT

latex2man preprocesses the LaTeX input to allow text to be used conditionally. A special sort of LaTeX comment is used for that purpose.

```
*      %% IF condition %%
*      %% ELSE %%
*      %% END-IF %%
```

A line must contain only such a comment and nothing else. *condition* is a boolean expression containing “names” and operators. The names given with the *-Cname* option have the value “true”, while all other names occurring in the expression are assumed to be “false”. If the evaluation of the boolean expression results in the value “true”, the text in the “then”-part is used and the text in the optional “else”-part is skipped (and vice versa). The IF/ELSE/END-IF may be nested. As boolean operators the following are allowed:

( and ) for grouping are allowed.

For example:

```
%% IF abc %%
abc set
%% IF xyz %%
xyz set
%% ELSE %%
xyz NOT set
%% END-IF %%
%% ELSE %%
abc NOT set
%% IF xyz || !XYZ %%
xyz OR !XYZ set
%% ELSE %%
xyz OR !XYZ NOT set
%% END-IF %%
%% END-IF %%
```

Run this manual page through latex2man with e.g. *-C'abc XYZ'* and have a look to the generated output. (If simply running the LaTeX-document through LaTeX, all lines are shown in the .dvi file).

```
abc NOT set
xyz OR !XYZ set
```

To check the conditional text feature, when latex2man is called with

```
-CHTML
    the lines 1a, 2b, 3b, and 4b;
-CTEXI
    the lines 1b, 2a, 3b, and 4b;
```

**-CMAN**

the lines 1b, 2b, 3a, and 4b;

**-CLATEX**

the lines 1b, 2b, 3b, and 4a;

calling LaTeX without preprocessing  
all lines

should be shown:

1b. The HTML conditional was not set.

2b. The TEXI conditional was not set.

3a. This text occurs only when viewing the MAN output

4b. The LATEX conditional was not set.

**TRANSLATION OF USER DEFINED MACROS**

The user macro translation file (given by the [*-transfile*]) contains Perl commands specifying the translation of LaTeX macros defined by the user. These macros may have none, one or two arguments. The following code is expected:

\* Comments start with a # up to the end of the line.

\* For a macro `\foo` with no arguments, the following code must be specified:

Translation to Man–Pages

```
$manMacro{'foo'} = '...';
```

Translation to HTML

```
$htmlMacro{'foo'} = '...';
```

Translation to TexInfo

```
$texiMacro{'foo'} = '...';
```

where ... is the translation.

\* For a macro `\foo{..}` with one argument, the following code must be specified:

Translation to Man–Pages

```
$manMacro1a{'foo'} = '...';
```

```
$manMacro1b{'foo'} = '...';
```

Translation to HTML

```
$htmlMacro1a{'foo'} = '...';
```

```
$htmlMacro1b{'foo'} = '...';
```

Translation to TexInfo

```
$texiMacro1a{'foo'} = '...';
```

```
$texiMacro1b{'foo'} = '...';
```

where ... is the translation. The 1a code is used before the argument, while 1b is typeset after the argument is set.

\* For a macro `\foo{..}{..}` with two arguments, the following code must be specified:

Translation to Man–Pages

```
$manMacro2a{'foo'} = '...';
```

```
$manMacro2b{'foo'} = '...';
```

```
$manMacro2c{'foo'} = '...';
```

Translation to HTML

```
$htmlMacro2a{'foo'} = '...';
$htmlMacro2b{'foo'} = '...';
$htmlMacro2c{'foo'} = '...';
```

Translation to TexInfo

```
$texiMacro2a{'foo'} = '...';
$texiMacro2b{'foo'} = '...';
$texiMacro2c{'foo'} = '...';
```

where ... is the translation. The 2a code is used before the first argument, 2b between the two arguments and 2c is typeset after the second argument is set.

\* The file latex2man.trans contains some example code.

### VERBATIM ENVIRONMENT

```
This
  {is}
    \texttt{a}
      $test$
        _of_
verbatim
<this is no HTML tag> and no @* TexInfo command
```

### SUBSECTION WORKS

This is a \subsection.

#### Subsubsection works

This is a \subsubsection.

#### Subsubsection still works

This is another \subsubsection.

### GENERAL REMARKS

1. Empty lines are typeset as paragraph separators.
2. The arguments of the LaTeX commands must not be split over several lines.
3. Do not nest calls to macros.
4. Except the mentioned environment and macros, the usage of other LaTeX environments or macros are not translated. Their usage will cause garbage in the output.
5. latex2man requires Perl version  $\geq 5.0004\_03$ .
6. If you want to install the system with the distributed Makefile, you need GNU-make. If you don't have it, you should execute the steps shown in the Makefile manually.

### CSS CLASSNAMES

The table below shows the names of CSS classes that will be included in the HTML tags as attributes. You can specify the CSS style properties in the *CSSfile* for these classes:

HTML tag	Class	Style applies to
body		the body of the HTML page

h1	titlehead	the title at the top of the HTML page specified as an argument to the <i>Name</i> environment
h4	authorhead	the author at the top of the HTML page specified as an argument to the <i>Name</i> environment
h4	datehead	the date at the top of the HTML page
h4	versionhead	the man page version at the top of the HTML page specified as an argument to the <i>setVersion</i> macro
h2	sectionname	a section title specified as an argument to the <i>section</i> macro
h4	subsectionname	a subsection title specified as an argument to the <i>subsection</i> macro
h5	subsubsectionname	a subsubsection title specified as an argument to the <i>subsubsection</i> macro
font	programe	a program name specified as an argument to the <i>Prog</i> macro
font	filename	a file name specified as an argument to the <i>File</i> macro
font	commandname	a command name specified as an argument to the <i>Cmd</i> macro
font	textstyle	all text that is not an argument to some LaTeX or latex2man macro
font	optstyle	a name of an option specified as an argument to the <i>Opt</i> , <i>oOpt</i> , <i>OptArg</i> , <i>oOptArg</i> or <i>oOptoArg</i> macros
font	argstyle	a name of an argument specified as an argument to the <i>Arg</i> , <i>oArg</i> , <i>OptArg</i> , <i>oOptArg</i> or <i>oOptoArg</i> macros
a, font	urlstyle	a URL specified as an argument to the <i>URL</i> macro
a, font	urlstyle.link	subclass of urlstyle class
a, font	urlstyle.visited	subclass of urlstyle class
a, font	urlstyle.hover	subclass of urlstyle class
a, font	emailstyle	an email specified as an argument to the <i>Email</i> macro
a, font	emailstyle.link	subclass of emailstyle class
a, font	emailstyle.visited	subclass of emailstyle class
a, font	emailstyle.hover	subclass of emailstyle class
table	tablestyle	a table specified as a <i>Table</i> environment
tr	rowstyle	a row of a table specified as a <i>Table</i> environment
td	cellstyle	a cell of a table specified as a <i>Table</i> environment

## SOME BUG FIX TESTS

Leading . and ’

Now leading . and ’ in generation troff output should work properly, since a \& is added. Therefore the \Dot macro has been deleted.

Thanks to **Frank.Schilder@Mathematik.Tu-Ilmenau.De**.

Testcase 1:

’\n’ ...

Testcase 2:

.foobar Testcase 3:

...

abc ... abc . efg ’ 123

%in verbatim

A % in a \verb and verbatim–environment was not emitted correctly. Thanks to Aleksey Nogin [nogin@cs.caltech.edu](mailto:nogin@cs.caltech.edu) for the bug report and bug fix.

% abc

% abc %

but ignore comments following this:

## REQUIREMENTS

Perl latex2man requires Perl version  $\geq 5.0004\_03$ .

Make If you want to install the system with the distributed Makefile, you need GNU–make. If you don't have it, you should execute the steps shown in the Makefile manually.

LaTeX LaTeX2e is required.

## CHANGES

Please check the file **latex2man–CHANGES** for the list of changes and acknowledgment to people contributing bugfixes or enhancements.

## VERSION

Version: 1.24 of 2010/12/22.

## LICENSE AND COPYRIGHT

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The actual version of Latex2man may be found on my homepage  
**<http://www.informatik–vollmer.de/software/latex2man.html>**.

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