The hyphenat package*

Author: Peter Wilson, Herries Press
Maintainer: LaTeX Project
https://github.com/LaTeX-Package-Repositories/herries-press

2026/10/12

Abstract

The hyphenat package can be used to either disable hyphenation throughout a document or to enable automatic hyphenation within words that include analphabetic characters. It also provides for hyphenatable monospaced fonts.

Contents

1 Introduction **1**

2 The hyphenat package **2**

3 The package code **3**
3.1 Hyphenation of TT text 6
3.2 Package features and caveats 12

Index **12**

1 Introduction

Questions about hyphenation seem to pop up fairly regularly on `comp.text.tex` newsgroup. Broadly speaking the questions take one of two forms:

- How can I disable hyphenation in my document?
- How can I enable hyphenation after the character …?

The hyphenat package attempts to provide solutions for both of these questions. This package is an extension of the uschyp package which was developed as part of a class and package bundle for typesetting ISO standards [Wil96]. This manual is typeset according to the conventions of the LaTeX docstrip utility which enables the automatic extraction of the LaTeX macro source files [GMS94].

Section 2 describes a package to enable 'words' containing analphabetic characters to be automatically hyphenated, or to disable hyphenation throughout a document or

*This file (`hyphenat.dtx`) has version number v2.3d, last revised 2026/10/12.

just disable it for short pieces of text. It also enables hyphenation, if required, of text typeset using monospaced (TT) fonts. For convenience I use TT to mean a monospaced font; TT does *not* indicate TrueType fonts. Commented source code for the package is in Section 3.

2 The hyphenat package

The hyphenat package has an option called none. Use of this option prevents any hyphenation throughout the document. If TEX is prevented from hyphenating it may complain about bad line breaks and you may find bits of text sticking out into the margin. If you use this option you should also consider using `\sloppy` and/or `\raggedright`.

The other option, htt, enables hyphenation of text typeset using Computer Modern Typewriter fonts (or their equivalent, such as Adobe Courier). If this option is used, then text typeset via either `\texttt` or `\ttfamily` will be in the default TT font and may be automatically hyphenated. Note that this will not affect any TT text typeset by either `\verb` or in a `verbatim` environment because they locally inhibit hyphenation. If you use this option you are likely to get a lot of `Font Warning` messages about being unable to load a font. It is reasonably safe to suggest that you can ignore these.

`\textnhtt` `\nhttfamily` The command `\textnhtt{`⟨*text*⟩`}` will typeset ⟨*text*⟩ in the default TT font with no automatic hyphenation. It has the same effect as `\texttt` when the htt option is not used. The `\nhttfamily` declaration is a companion to the `\textnhtt` command and is analogous to the `\ttfamily` declaration in that it prevents any hyphenation of TT fonts. For example, if the Courier font is used as the monospaced font instead of the CM typewriter font, then hyphenation may occur with the Courier in places where it wouldn't with CM. The command or environment may be used to ensure that Courier is treated the same as CM regarding hyphenation.

`\nohyphens` The command `\nohyphens{`⟨*text*⟩`}` will typeset ⟨*text*⟩ without any automatic hyphenation. This is intended to be used for short pieces of text.

An *analphabetic* character is a character than does not appear in the alphabet. Analphabetic characters include the numerals and punctuation characters. If a 'word' contains any analphabetic characters, TEX's automatic hyphenation capability is disabled for any syllables following the (first) of the analphabetic characters in the word. Words containing analphabetic characters often occur as the names of variables in computer programs, and of course, as URLs on the Web. The hyphenat package provides several commands enabling automatic hyphenation of words containing analphabetics.

`\_` In LATEX a 'word' containing an underscore (e.g., `` `letters_with_underscores' ``) can be hyphenated at the underscore by using a discretionary hyphen. That is, write the word like `letters\_\-with\_\-underscores`. This has two potential disadvantages: (a) more typing is involved, and (b) if the word is broken at one underscore, hyphenation of any succeeding syllables is disabled. The hyphenat package redefines the `\_` command so that hyphenation can automatically occur after an underscore and further hyphenation within the word is not disabled. Thus, this example word can just be written as `letters\_with\_underscores`.

Note that following the revised `\_` command with a discretionary hyphen makes its behaviour revert to the LATEX default.

`\bshyp` The `\bshyp` command can be used to print a backslash and have following hyphenation.

`\fshyp` The `\fshyp` command can be used to print a forward slash and have following hyphenation.

\dothyp The \dothyp command can be used to print a period (full stop) and have following hyphenation.

\colonhyp The \colonhyp command can be used to print a colon and have following hyphenation.

For example, to typeset first\second/third.fourth:fifth_sixth, allowing hyphenation at the analphabetic characters the source would be:

```
first\bshyp{}second\fshyp{}third\dothyp{}fourth\colonhyp{}fifth\_sixth
```

\hyp TEX does not want to hyphenate a word that appears in the source already hyphenated, such as electromagnetic-endoscopy. The \hyp command is like the other \...hyp commands, only it typesets a hyphen and allows full automatic hyphenation of the other words forming the compound word. It is used like electromagnetic\hyp{}endoscopy.

3 The package code

Announce the name and version of the package, which requires LaTeX 2_ε.

```
⟨*usc⟩
\NeedsTeXFormat{LaTeX2e}
\ProvidesPackage{hyphenat}[2026/10/12 v2.3d hyphenation utilities]
```

An option is provided whereby all hyphenation throughout a document is disabled. Hyphenation throughout a document can be disabled in at least the following ways:

1. Set \exhyphenpenalty and \hyphenpenalty to 10000 (the *TEXbook* exercise 14.6);
2. Use an 'unknown' language (i.e., one that has no hyphenation patterns, but for a complete document this would cause problems if a package like babel was used);
3. Set \lefthyphenmin and \righthyphenmin to large values (see lthyphen.dtx) to prevent hyphenation in the first \lefthyphenmin characters and in the last \righthyphenmin characters.

I have chosen the *TEXbook* solution for global hyphenation suppression as it is generic.

```
\DeclareOption{none}%
    {\hyphenpenalty=10000\exhyphenpenalty=10000\relax}
```

An option is provided whereby TT text may be hyphenated. See §3.1 for how it is implemented via the \touchttfonts and \touchextrattfonts commands. At the end we have to ensure that the normal text font is selected.

```
\DeclareOption{htt}{%
  \PackageWarningNoLine{hyphenat}{%
      ******************************\MessageBreak
      * You have used the htt option.\MessageBreak
      * You are likely to get many Font Warning messages.\MessageBreak
      * These can usually be ignored.\MessageBreak
      ******************************}
  \AtBeginDocument{\touchttfonts\touchextrattfonts\normalfont}}
\ProcessOptions
```

\langwohyphens We will use a non-existent language as a local means of disabling hyphenation.

```
\newlanguage\langwohyphens
```

(*End of definition for* `\langwohyphens`.)

This package redefines the `\_` command to include a discretionary hyphen.[1] The new definition provides for full hyphenation throughout a construct such as `long\_identifier`. The default LaTeX behaviour is that this kind of construct has to be written as as `long\_\-identifier` if hyphenation is to be enabled at the position of the underscore; this also switched off hyphenation after the first use of `\_` or `_\-` within the construct.

Users of this package must not use a discretionary hyphen in conjunction with an underscore.

The behaviour of `_` as a subscript command in math mode is unaffected as is the use of a naked `_` in text (an error).

The original attempt was to enable a naked `_` to be used in ordinary text. The code for this follows. The problem that arose with this was that, for example, `\input{long_filename}` would fail. With the original code, a naked `_` could not be used in `\label`, `\cite` or `\ref` commands as `\protect` is not properly enabled in these commands.

```
% uscaslet.sty
% (Email from Donald Arseneau 10 October 1997)
\newcommand{\BreakableUnderscore}{\leavevmode
\nobreak\hskip\z@skip
\textunderscore
\-\nobreak\hskip\z@skip}
\def\UnderOrSub0{\ifmmode\sb\else\BreakableUnderscore\fi}
\AtBeginDocument{\catcode`\_\active}
\begingroup\catcode`\_\active
\@firstofone{\endgroup\def_{\protect\UnderOrSub0}}
\DeclareRobustCommand{\_}{%
  \ifmmode\nfss@text{\textunderscore}\else\BreakableUnderscore\fi}
\endinput
```

Donald Arseneau has since developed his underscore package, available on CTAN, that eliminates the above problems.

Now for the hyphenat version. This is reduced from Donald Arseneau's code (Email from him on Friday 10 October 1997) with my comments.

This version includes macros for breakable backslashes, forward slashes and periods as well as underscores.

`\prw@zbreak` `\prw@zbreak` is just defined to save some potential typos further on.

```
\newcommand{\prw@zbreak}{\nobreak\hskip\z@skip}
```

(*End of definition for* `\prw@zbreak`.)

`\BreakableUnderscore` This macro adds a discretionary hyphen after an underscore. As Ray Goult discovered, using the shorthand `\-` for `\discretionary{-}{}{}` causes problems in a `tabbing` environment which modifies the definition of `\-`, so we have to use the long form.

```
\newcommand{\BreakableUnderscore}{\leavevmode%
  \prw@zbreak\textunderscore\discretionary{-}{}{}\prw@zbreak}
```

(*End of definition for* `\BreakableUnderscore`.)

[1] Thanks to Donald Arseneau for pointing the author in the right direction.

The next bit of Donald Arseneau's code preserves any following spaces (yes, that is a zero at the end of the command name). Unfortunately this is not required any more.

```
\def\UnderOrSub0{\ifmmode\sb\else\BreakableUnderscore\fi}
```

Originally the underscore was made active only at the beginning of the document to avoid possibly upsetting other packages that had been loaded:

```
\AtBeginDocument{\catcode`\_\active}
```

but this broke input of files with names that included underscores. Next a new underscore command was defined.

```
\begingroup\catcode`\_\active
\@firstofone{\endgroup\def_{\protect\UnderOrSub0}}
```

but again this broke file names.

And finally redefine the _ command.

```
\DeclareRobustCommand{\_}{%
  \ifmmode\nfss@text{\textunderscore}\else\BreakableUnderscore\fi}
```

\BreakableBackslash
\BreakableSlash
\BreakablePeriod
\BreakableColon

We do similar breakable definitions for \, / and . characters.

```
\newcommand{\BreakableBackslash}{\leavevmode%
  \prw@zbreak\textbackslash\discretionary{-}{}{}\prw@zbreak}
\newcommand{\BreakableSlash}{\leavevmode%
  \prw@zbreak/\discretionary{-}{}{}\prw@zbreak}
\newcommand{\BreakablePeriod}{\leavevmode%
  \prw@zbreak.\discretionary{-}{}{}\prw@zbreak}
\newcommand{\BreakableColon}{\leavevmode%
  \prw@zbreak:\discretionary{-}{}{}\prw@zbreak}
```

(*End of definition for* `\BreakableBackslash` *and others.*)

\bshyp
\fshyp
\dothyp
\colonhyp

Now for the user commands. I was hoping to have these of the form \\, \/ and \., but these are all part of the basic set of commands. \? appears to be the only unused single analphabetic command, and I chose this for a breakable period (at least the symbol does include a dot). Normal alphabetic commands are used for the others. For the second release, I changed my mind and replaced the original \? command with \dothyp instead:

- \dothyp is more consistent with the other breakable commands;
- \? might be used in other classes or packages;
- I, or someone else, might want to later use \? for a breakable question mark.

To print `first\second/third.fourth:fifth`, allowing hyphenation within each 'word' and also at the \, /, . and : characters, the source should be:
`first\bshyp{}second\fshyp{}third\dothyp{}fourth\colonhyp{}fifth`

```
\DeclareRobustCommand{\bshyp}{%
  \ifmmode\backslash\else\BreakableBackslash\fi}
\DeclareRobustCommand{\fshyp}{%
  \ifmmode/\else\BreakableSlash\fi}
\DeclareRobustCommand{\dothyp}{%
  \ifmmode.\else\BreakablePeriod\fi}
\DeclareRobustCommand{\colonhyp}{%
  \ifmmode:\else\BreakableColon\fi}
```

(*End of definition for* `\bshyp` *and others. These functions are documented on page 2.*)

`\BreakableHyphen` `\hyp`

Gabriel Zachmann (`zach@igd.fhg.de`) discovered on 2000/12/21 that my original code for this which included `\discretionary{-}{}{}` in some circumstances and with some non-CMR fonts produced a double hyphen. The revised code has not broken (yet).

```
\newcommand{\BreakableHyphen}{\leavevmode%
  \prw@zbreak-\discretionary{}{}{}\prw@zbreak}
\DeclareRobustCommand{\hyp}{%
  \ifmmode-\else\BreakableHyphen\fi}
```

(*End of definition for* `\BreakableHyphen` *and* `\hyp`.)

3.1 Hyphenation of TT text

The default specification for the Computer Modern Typewriter font disables hyphenation by setting the `\hyphenchar` for the font to be -1 (in other fonts the `\hyphenchar` is normally 45). To enable hyphenation for text typeset with the cmtt font(s) we need to set the `\hyphenchar` to the position of the hyphen in the font. This can be done by:

1. Replacing the default `...tt.fd` file;
2. Define a new virtual font with the `\hyphenchar` set;
3. Define a new font family based on cmtt with the `\hyphenchar` set.

The first choice is not good because it is effectively a global change to a LaTeX installation. The second involves some amount of work (both on the package writer's and users' parts) and depends on the DVI driver being able to handle virtual fonts. The third option was initially chosen as being the simplest and most portable. It principally involved defining `.fd` files for a font family that I called cmhtt, as being a hyphenatable version of cmtt.

`\textnhtt` `\nhttfamily`

`\textnhtt` is equivalent to `\texttt` but it ensures that its argument will never be hyphenated. Similarly the `\nhttfamily` declaration is the corresponding equivalent to the `\ttfamily` declaration. On the assumption that this will only be used for short pieces of text we will implement this by using a non-existent language; this does mean, however, that any language-specific typesetting (for example via the babel package) will be locally disabled.

```
\DeclareTextFontCommand{\textnhtt}{\nhttfamily}
\DeclareRobustCommand{\nhttfamily}
  {\not@math@alphabet\nhttfamily\mathtt
   \fontfamily\ttdefault\selectfont\language\langwohyphens}
```

(*End of definition for* `\textnhtt` *and* `\nhttfamily`. *These functions are documented on page 2.*)

`\nohyphens`

While we are at it, we might as well define a general command to disable hyphenation of its argument text.

```
\newcommand{\nohyphens}[1]{{\language\langwohyphens #1}}
```

(*End of definition for* `\nohyphens`. *This function is documented on page 2.*)

`\touchttfonts` There is a fourth way of specifying hyphenatable TT fonts that does not depend on generating any extra `.fd` files but does depend on the fact that TEX only touches (loads) a font once. The method is to select all likely TT fonts at the beginning of the document, and then to select the normal font. When each TT font is selected its `\hyphenchar` is set to the default hyphen character for the font rather than to the -1 as specified in the `.fd` files. The command `\touchttfonts` selects all likely TT fonts once. (This has been tested with no font packages (i.e., vanilla LATEX cmtt fonts), with the PSNFSS font packages, and with the pandora package using the Pandora pntt TT font).

```
\newcommand{\touchttfonts}{%
```

The Medium series in Normal, Italic, Slanted and Small Caps.

```
  \fontfamily{\ttdefault}\fontseries{m}\fontshape{n}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{m}\fontshape{it}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{m}\fontshape{sl}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{m}\fontshape{sc}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
```

The Bold series in Normal, Italic, Slanted and Small Caps.

```
  \fontfamily{\ttdefault}\fontseries{b}\fontshape{n}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{b}\fontshape{it}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{b}\fontshape{sl}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{b}\fontshape{sc}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
```

The Bold Extended series in Normal, Italic, Slanted and Small Caps.

```
  \fontfamily{\ttdefault}\fontseries{bx}\fontshape{n}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{bx}\fontshape{it}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{bx}\fontshape{sl}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{bx}\fontshape{sc}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
```

The Semi-bold series in Normal, Italic, Slanted and Small Caps.

```
  \fontfamily{\ttdefault}\fontseries{sb}\fontshape{n}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{sb}\fontshape{it}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{sb}\fontshape{sl}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{sb}\fontshape{sc}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
```

The Condensed series in Normal, Italic, Slanted and Small Caps.

```
  \fontfamily{\ttdefault}\fontseries{c}\fontshape{n}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
```

```
  \fontfamily{\ttdefault}\fontseries{c}\fontshape{it}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{c}\fontshape{sl}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{c}\fontshape{sc}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
```

The Light series in Normal, Italic, Slanted and Small Caps.

```
  \fontfamily{\ttdefault}\fontseries{l}\fontshape{n}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{l}\fontshape{it}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{l}\fontshape{sl}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{l}\fontshape{sc}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
```

Miscellaneous cmtt not covered above (from `cmfonts.fdd`).

```
  \fontfamily{\ttdefault}\fontseries{m}\fontshape{ui}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{bx}\fontshape{ui}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
  \fontfamily{\ttdefault}\fontseries{m}\fontshape{In}\selectfont%
    \hyphenchar\font=\defaulthyphenchar
```

End of the definition of `\touchttfonts`.

```
}
```

(*End of definition for* `\touchttfonts`.)

`\touchextrattfonts` This macro is provided as a hook in case `\touchttfonts` does not cover the required range. It should be redefined in the preamble after loading the hyphenat package. The definition of `\touchttfonts` can be used as a template for the new definition.

```
\newcommand{\touchextrattfonts}{}
```

(*End of definition for* `\touchextrattfonts`.)

This completes the package.

```
⟨/usc⟩
```

Just in case anyone is interested, the following is my original specification of a hyphenatable TT font family.

Now to specify the various `.fd` files for the cmhtt font. These are essentially copies of the files generatable from `cmfonts.fdd` (1998/03/27), which is part of the LaTeX base distribution.

```
⟨*ot1⟩
```

The OT1 coding for normal typesetting.

```
\ProvidesFile{ot1cmhtt.fd}[1998/12/31 Hyphenatable cmtt fonts]
\DeclareFontFamily{OT1}{cmhtt}{\hyphenchar\font45}
\DeclareFontShape{OT1}{cmhtt}{m}{n}
  {%
   <5><6><7><8>cmtt8<9>cmtt9%
   <10><10.95>cmtt10%
```

```
    <12><14.4><17.28><20.74><24.88>cmtt12%
  }{}
\DeclareFontShape{OT1}{cmhtt}{m}{it}
  {%
   <5><6><7><8><9>%
   <10><10.95><12><14.4><17.28><20.74><24.88>cmitt10%
  }{}
\DeclareFontShape{OT1}{cmhtt}{m}{sl}
  {%
   <5><6><7><8><9>%
   <10><10.95><12><14.4><17.28><20.74><24.88>cmsltt10%
  }{}
\DeclareFontShape{OT1}{cmhtt}{m}{sc}
  {%
   <5><6><7><8><9>%
   <10><10.95><12><14.4><17.28><20.74><24.88>cmtcsc10%
  }{}
\DeclareFontShape{OT1}{cmhtt}{m}{ui}
  {<->ssub*cmhtt/m/it}{}
\DeclareFontShape{OT1}{cmhtt}{bx}{n}
  {<->ssub*cmhtt/m/n}{}
\DeclareFontShape{OT1}{cmhtt}{bx}{it}
  {<->ssub*cmhtt/m/it}{}
\DeclareFontShape{OT1}{cmhtt}{bx}{ui}
  {<->ssub*cmhtt/m/it}{}
```

That's all for this file.

⟨/ot1⟩

⟨∗ot1slides⟩

The OT1 coding for slides class.

```
\ProvidesFile{ot1lcmhtt.fd}[1998/12/31 Hyphenatable cmtt fonts for slides]
\DeclareFontFamily{OT1}{lcmhtt}{\hyphenchar\font45}
\DeclareFontShape{OT1}{lcmhtt}{m}{n}
  {%
   <13.82><16.59><19.907><23.89><28.66><34.4><41.28>%
   cmtt8%
  }{}
\DeclareFontShape{OT1}{lcmhtt}{m}{In}
  {%
   <13.82><16.59><19.907><23.89><28.66><34.4><41.28>%
   icmtt8%
  }{}
\DeclareFontShape{OT1}{lcmhtt}{m}{it}
  {%
   <13.82><16.59><19.907><23.89><28.66><34.4><41.28>%
   cmitt10%
  }{}
\DeclareFontShape{OT1}{lcmhtt}{m}{ui}
  {<->ssub*lcmhtt/m/it}{}
\DeclareFontShape{OT1}{lcmhtt}{bx}{ui}
  {<->ssub*lcmhtt/m/it}{}
```

That's all for this file.

⟨/ot1slides⟩

⟨*u⟩

The U coding for normal typesetting.

```
\ProvidesFile{ucmhtt.fd}[1998/12/31 Hyphenatable cmtt fonts]
\DeclareFontFamily{U}{cmhtt}{\hyphenchar\font45}
\DeclareFontShape{U}{cmhtt}{m}{n}
  {%
   <5><6><7><8><9>cmtt8<9>cmtt9%
   <10><10.95>cmtt10%
   <12><14.4><17.28><20.74><24.88>cmtt12%
  }{}
\DeclareFontShape{U}{cmhtt}{m}{it}
  {%
   <5><6><7><8><9>%
   <10><10.95><12><14.4><17.28><20.74><24.88>cmitt10%
  }{}
\DeclareFontShape{U}{cmhtt}{m}{sl}
  {%
   <5><6><7><8><9>%
   <10><10.95><12><14.4><17.28><20.74><24.88>cmsltt10%
  }{}
\DeclareFontShape{U}{cmhtt}{m}{sc}
  {%
   <5><6><7><8><9>%
   <10><10.95><12><14.4><17.28><20.74><24.88>cmtcsc10%
  }{}
\DeclareFontShape{U}{cmhtt}{m}{ui}
  {<->ssub*cmhtt/m/it}{}
\DeclareFontShape{U}{cmhtt}{bx}{n}
  {<->ssub*cmhtt/m/n}{}
\DeclareFontShape{U}{cmhtt}{bx}{it}
  {<->ssub*cmhtt/m/it}{}
\DeclareFontShape{U}{cmhtt}{bx}{ui}
  {<->ssub*cmhtt/m/it}{}
```

That's all for this file.

⟨/u⟩

⟨*t1⟩

The T1 coding for normal typesetting.

```
\ProvidesFile{t1cmhtt.fd}[1998/12/31 Hyphenatable cmtt fonts]
\providecommand{\EC@httfamily}[5]{%
  \DeclareFontShape{#1}{#2}{#3}{#4}%
  {<5><6><7><8>#50800%
   <9><10><10.95><12><14.4><17.28><20.74><24.88><29.86>%
   <35.83>genb*#5}{}}
\DeclareFontFamily{T1}{cmhtt}{\hyphenchar\font45}
\EC@httfamily{T1}{cmhtt}{m}{n}{ectt}
\EC@httfamily{T1}{cmhtt}{m}{sl}{ecst}
\EC@httfamily{T1}{cmhtt}{m}{it}{ecit}
```

```
\EC@httfamily{T1}{cmhtt}{m}{sc}{ectc}
\DeclareFontShape{T1}{cmhtt}{bx}{n}%
  {<->ssub*cmhtt/m/n}{}
\DeclareFontShape{T1}{cmhtt}{bx}{it}%
  {<->ssub*cmhtt/m/it}{}
```

That's all for this file.

⟨/t1⟩

⟨*t1slides⟩

The T1 coding for slides class typesetting.

```
\ProvidesFile{t1lcmhtt.fd}[1998/12/31 Hyphenatable cmtt fonts for slides]
\DeclareFontFamily{T1}{lcmhtt}{\hyphenchar\font45}
\DeclareFontShape{T1}{lcmhtt}{m}{n}
  {%
   <13.82><16.59><19.907><23.89><28.66><34.4><41.28>%
   ecltt8%
  }{}
\DeclareFontShape{T1}{lcmhtt}{m}{In}
  {%
   <13.82><16.59><19.907><23.89><28.66><34.4><41.28>%
   iecltt8%
  }{}
\DeclareFontShape{T1}{lcmhtt}{m}{it}
  {%
   <13.82><16.59><19.907><23.89><28.66><34.4><41.28>%
   ecit1000%
  }{}
```

That's all for this file.

⟨/t1slides⟩

⟨*ts1⟩

The TS1 coding for normal typesetting.

```
\ProvidesFile{ts1cmhtt.fd}[1998/12/31 Hyphenatable cmtt fonts]
\providecommand{\EC@httfamily}[5]{%
  \DeclareFontShape{#1}{#2}{#3}{#4}%
  {<5><6><7><8>#50800%
   <9><10><10.95><12><14.4><17.28><20.74><24.88><29.86>%
   <35.83>genb*#5}{}}
\DeclareFontFamily{TS1}{cmhtt}{\hyphenchar\font45}
\EC@httfamily{TS1}{cmhtt}{m}{n}{tctt}
\EC@httfamily{TS1}{cmhtt}{m}{sl}{tcst}
\EC@httfamily{TS1}{cmhtt}{m}{it}{tcit}
```

That's all for this file.

⟨/ts1⟩

3.2 Package features and caveats

Features :

- The `none` option disables all hyphenation. If you use this option you should also consider using `\sloppy` (to reduce TEX's moans about bad line breaks) or `\raggedright` (to reduce moans about overfull boxes).
- `\_` prints an underscore (per the traditional command).
- `_` makes a subscript in math mode, and an error in text mode.
- Words surrounding `\_` are hyphenated normally and there is a discretionary hyphenation point immediately after the underscore.
- An underscore character is used if the font encoding has one, otherwise it uses a drawn underscore.

Caveats :

- Using `\_\-` together disables hyphenation in any succeeding word.
- Using `\nohyphens` disables any language-specific commands within its argument. The same applies to `\textnhtt` and `\nhttfamily`.
- If the `htt` option is used, then any resetting of the default TT font must be done in the preamble before the `\begin{document}`.

References

[GMS94] Michel Goossens, Frank Mittelbach, and Alexander Samarin. *The LaTeX Companion*. Addison-Wesley Publishing Company, 1994.

[Wil96] Peter R. Wilson. *LaTeX for standards: The LaTeX package files user manual*. NIST Report NISTIR, June 1996.

Index

The italic numbers denote the pages where the corresponding entry is described, numbers underlined point to the definition, all others indicate the places where it is used.

Symbols

`\_` *2*
`\_` 19

A

`\AtBeginDocument` 13

B

`\backslash` 30
`\BreakableBackslash` 21, 30
`\BreakableColon` 21, 36
`\BreakableHyphen` 37
`\BreakablePeriod` 21, 34
`\BreakableSlash` 21, 32
`\BreakableUnderscore` 17, 20
`\bshyp` *2*
`\bshyp` 29

C

`\colonhyp` *3*
`\colonhyp` 29

D

`\DeclareFontFamily` 106, 139, 162, 200, 212, 236
`\DeclareFontShape` 107, 113, 118, 123, 128, 130, 132, 134, 140, 145, 150, 155, 157,

163, 169, 174, 179, 184, 186, 188, 190, 196, 205, 207, 213, 218, 223, 232
\DeclareRobustCommand 19, 29, 31, 33, 35, 39, 42
\DeclareTextFontCommand 41
\defaulthyphenchar 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100
\discretionary 18, 22, 24, 26, 28, 38
\dothyp *3*
\dothyp 29

E

\exhyphenpenalty 5

F

\font 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100, 106, 139, 162, 200, 212, 236
\fontfamily . 44, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99
\fontseries 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99
\fontshape 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99
\fshyp *2*
\fshyp 29

H

\hyp *3*
\hyp 37
\hyphenchar 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100, 106, 139, 162, 200, 212, 236
\hyphenpenalty 5

I

\ifmmode 20, 30, 32, 34, 40
ifmmode commands:
\ifmmode: 36

L

\language 44, 45
\langwohyphens 15, 44, 45

M

\mathtt 43
\MessageBreak 8, 9, 10, 11

N

\newlanguage 15
\nhttfamily *2*
\nhttfamily 41
\nohyphens *2*
\nohyphens 45
\normalfont 13

P

\PackageWarningNoLine 7
\providecommand 195, 231
\ProvidesFile . 105, 138, 161, 194, 211, 230
\ProvidesPackage 3
prw@zbreak commands:
\prw@zbreak: 28

T

TEX and LATEX 2ε commands:
\EC@httfamily 195, 201, 202, 203, 204, 231, 237, 238, 239
\nfss@text 20
\not@math@alphabet 43
\prw@zbreak . . 16, 18, 22, 24, 26, 28, 38
\z@skip 16
\textbackslash 22
\textnhtt *2*
\textnhtt 41
\textunderscore 18, 20
\touchextrattfonts 13, 102
\touchttfonts 13, 46
\ttdefault . . 44, 47, 49, 51, 53, 55, 57, 59, 61, 63, 65, 67, 69, 71, 73, 75, 77, 79, 81, 83, 85, 87, 89, 91, 93, 95, 97, 99