

texlinks.sty

TeX-Related Links for `hyperref`, `blog.sty` (and maybe more)*

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Abstract

`texlinks.sty` provides a couple of shorthands for making hyperlinks with `hyperref`'s¹ `\href` command, linking to URLs that one often refers to in discussing TeX-related material. Especially, TUG material (including texhax postings and TUGboat articles) and CTAN pages (package descriptions, directories, Catalogue) are supported, also the UK FAQ, the L^AT_EX Wikibook, and Wikipedia (where much TeX-related software is described in a visually appealing manner). However, up to now I have used them for *HTML* overviews generated with `blog.sty`. They may as well be useful with better known (and better developed) TeX → HTML software such as `tex4ht`² or `LaTeX2HTML`³ (I don't know).

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*This document describes version **v0.4** of `texlinks.sty` as of 2011/08/27.

[†]<http://contact-ednotes.sty.de.vu>

¹<http://ctan.org/pkg/hyperref>

²<http://ctan.org/pkg/tex4ht>

³<http://ctan.org/pkg/latex2html>

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1 Usage

The file `texlinks.sty` is provided ready, installation only requires putting it somewhere where T_EX finds it (which may need updating the filename data base).⁴

Below the `\documentclass` line(s) and above `\begin{document}`, you load `texlinks.sty` (as usually) by

```
\usepackage{texlinks}
```

Package options and user commands are described near their definitions below in the implementation section.

2 Package File Header (Legalize)

```
1 \NeedsTeXFormat{LaTeX2e}[1994/12/01] %% \newcommand* etc.
2 \ProvidesPackage{texlinks}[2011/08/27 v0.4 TeX-related links (UL)]
3 %% copyright (C) 2011 Uwe Lueck,
4 %% http://www.contact-ednotes.sty.de.vu
5 %% -- author-maintained in the sense of LPPL below.
6 %%
7 %% This file can be redistributed and/or modified under
8 %% the terms of the LaTeX Project Public License; either
9 %% version 1.3c of the License, or any later version.
```

⁴<http://www.tex.ac.uk/cgi-bin/texfaq2html?label=inst-wlcf>

```

10 %% The latest version of this license is in
11 %%   http://www.latex-project.org/lppl.txt
12 %% We did our best to help you, but there is NO WARRANTY.
13 %%
14 %% Please report bugs, problems, and suggestions via
15 %%
16 %%   http://www.contact-ednotes.sty.de.vu
17 %%

```

3 Outline

The link macros of `texlinks` are based on macros `\httpref` and `\httpsref`. For use of `texlinks` with `blog.sty`, the latter provides definitions of `\httpref` and `\httpsref` suitable for HTML, where a choice of opening a new tab or window—or not—is relevant.

For use with `hyperref` (or ...?), `texlinks` may provide definitions of `\httpref` and `\httpsref` based on `\href`. The decision to do so or not may happen at `\begin{document}`. `blog.sty` generates HTML without using the `{document}` environment, so we might assume that when `\begin{document}` is found, we are running `hyperref`, or just *something* that provides a useful `\href`. We might then execute a definition of `\httpref` in terms of `\href`. Well, not sure ...

Moreover, a PDF file with links may be *printed*, and clicking the links on the paper may fail. URLs in main text, on the other hand, sometimes are troublesome. I consider it a good idea to present links with their URL as the displayed text in *footnotes* (or endnotes). It may even be useful with HTML to present the URLs displayed in some 2011/01/27: “appendix.”—This idea has been resumed in v0.2 only, `\urlfoot`.

4 Package Options

Somebody may want to suppress a definition of `\httpref` at `\begin{document}` ... [2011/01/24, [TODO](#)]

v0.3: Package option `[blog]` suppresses *any* `\AtBeginDocument` actions—fine for use with `blog.sty`.

```

18 \DeclareOption{blog}{\let\AtBeginDocument\@gobble}

```

This option may be improved, and another option may be useful for different purposes than running `blog.sty`.

```

19 \ProcessOptions

```

5 Providing \httpref and \httpsref

`\httpref{<host-path/#frag>}{<text>}`

should display `<text>` as a link to `http://<host-path/#frag>`;

`\httpsref{<host-path/#frag>}{<text>}`

is the obvious analogue for `https:` URLs. In case `\begin{document}` is found with a definition of `\href` present, we provide definitions of `\httpref` and `\httpsref` in terms of `\href` there:

```
20 \AtBeginDocument{%
21   \ifundefined{href}{%
22     %       \PackageError ... TODO!? 2011/01/24
23     }{\newcommand*\httpref}[1]{\href {http://#1}}%
24     \newcommand*\httpsref[1]{\href{https://#1}}}
```

6 Variants of \httpref and \httpsref

`\NormalHTTPref` may be used as an alias for `\httpref` in situations where the latter has been redefined (as in Section 6.2):

```
25 \AtBeginDocument{%% TODO: options, guarded \let (mine, HO)
26   \ifdefinable\NormalHTTPref{\let\NormalHTTPref\httpref}}
```

`\ithttpref{<url>}{<text>}` displays `<text>` in italics:

```
27 \newcommand*\ithttpref[2]{\NormalHTTPref{#1}{\textit{#2}}}
```

6.1 URLs as Links

With `\urlhttpref{<url>}`, that URL `<url>` is displayed:

```
28 \newcommand*\urlhttpref[1]{%
29   \NormalHTTPref{#1}{\urlfmt{\httpref{#1}}}
```

`\httpprefix` is an idea that was missing in `blog.sty` up to v0.3. It may be used to determine generally whether a display of an URL should include `http://`. I choose as default what was default in `blog.sty` (i.e., “don’t include”):

```
30 \ifdefinable\httpprefix{\let\httpprefix\@empty}    %% TODO cf. above
```

`\let\httpprefix\relax` would be bad for `blog.sty` (would display `\relax`), while it would be somewhat more efficient.

Now you may customize `\httpprefix` by

```
\renewcommand{\httpprefix}{http://}
```

—or by `\let\httpprefix\theHTTPprefix`:

31 `\newcommand*{\theHTTPprefix}{http://}`

`\urlfmt{<url>}` is chosen as `\texttt` here and may be customized, e.g., with the `breakurl` package.

32 `\ifdefinable\urlfmt{\let\urlfmt\texttt}`

In `blog.sty` (as of 2010/05/26), there was a command `\urlref` instead of `\urlhttpref`. It did not provide `\urlfmt`.

With `\urlhttpsref{<url>}`, we *force* displaying ‘https://’:

33 `\newcommand*{\urlhttpsref}[1]{\httpsref{#1}{\urlfmt{https://#1}}}`

6.2 Linking URLs in Footnotes

`\foothttpurlref{<url>}` just is like `\footnote{\urlhttpref{<url>}}`:

34 `\newcommand*{\foothttpurlref}[1]{\footnote{\urlhttpref{#1}}}`

`\urlfoot{<short>}{<id>}` redefines `\httpref` so that you can use all the shorthand macros based on `\httpref` to get the according URL display (as provided by `\urlhttpref`) in a footnote without the need to include the entire URL in your source code. `\urlfoot` is available with `<short>` and `<id>` when a shorthand `\<short>{<id>}{<text>}` has been defined where `\<short>` is the macro name and `<id>` is the target identifier (usually part of the URL generated from `<id>`) according to the syntax declaration of `\<short>`.

35 `\newcommand*{\urlfoot}[2]{%`

36 `\let\httpref\foothttpurlref`

37 `\let\httpprefix\theHTTPprefix %% TODO customizable!?`

38 `\csname #1\endcsname{#2}{}}`

Example:

`\CtanPkgRef{morehype}{MoreHype}` and `\ctanpkgref{morehype}`

are provided below for linking to `http://ctan.org/pkg/morehype`.

- Try `\CtanPkgRef` *here*: `MoreHype`,
for the *footnote* try `\urlfoot{CtanPkgRef}{morehype}`;⁵
- try `\ctanpkgref` *here*: `morehype`,
for the *footnote* try `\urlfoot{ctanpkgref}{morehype}`.⁶`morehype`

The lonely ‘morehype’ you see there above demonstrates that it doesn’t work with `\ctanpkgref` because `\ctanpkgref` doesn’t have separate arguments for `<id>` and `<text>`, it actually doubles `<id>`. A local `\let\ctanpkgref\CtanPkgRef` could help, but right now I prefer waiting for a better idea. [TODO]

v0.3: Now that using `\urlfoot` and `\ctanpkgref` together is so clumsy, while I use it quite often, we get `\urlpkgfoot{<package-id>}`, abbreviating `\urlfoot{CtanPkgRef}{<package-id>}`:

39 `\newcommand* {\urlpkgfoot} {\urlfoot{CtanPkgRef}}`

⁵`http://ctan.org/pkg/morehype`

⁶`http://ctan.org/pkg/morehype`

7 Wikipedia

7.1 Backbones

As of v0.4, we have a “backbone” macro

```
\wikiref{<language-code>}{<lemma>}{<text>}
```

for links to Wikipedia. *<language-code>* consists of two characters like ‘de’ for German Wikipedia articles or ‘en’ for English ones. *<lemma>* is the identifier of the article, and *<text>* is displayed as the link:

```
40 \newcommand*\wikiref[2]{\httpref{#1.wikipedia.org/wiki/#2}}
```

There is `\Wikiref{<language-code>}{<lemma>}` for the case that *<lemma>* and *<text>* are the same:

```
41 \newcommand*\Wikiref[2]{\wikiref{#1}{#2}{#2}}
```

We could have `\wikiref{<lang>}[<id>]{<text>}` instead, then `\Wikiref` would not be needed; however, the present code is to work with `blog.sty`, where optional arguments fail.

Quite often, programs share their names with movies, biological species, etc., then lemma disambiguation is required. Usually, we don’t want to display the disambiguation.

```
\Wikidisambref{<language-code>}{<term>}{<suffix>}
```

will link to

```
http://en.wikipedia.org/wiki/<term>_(<suffix>)
```

```
42 \newcommand*\Wikidisambref[3]{\wikiref{#1}{#2 (#3)}{#2}}
```

There was something like a more general variant `\wikidisambref`, now I doubt its usefulness and `omit` it in order to see where it occurs (2011/05/13).

For **anchors**, ‘#’ can be used with `blog.sty`—and even with `hyperref`.

Example: `\wikienref{TeX#History}{\TeX}` for $\text{T}_{\text{E}}\text{X}$.

7.2 English and German

The next macros just save you from typing braces around the language codes for English and German: `\wikienref{<lemma>}{<text>}` refers to the English Wikipedia, `\wikideref{<lemma>}{<text>}` refers to the German one.

```
43 \newcommand*\wikideref{\wikiref{de}}
```

```
44 \newcommand*\wikienref{\wikiref{en}}
```

`\Wikideref{<lemma>}` refers to article *<lemma>* in the German Wikipedia and displays *<lemma>* as *<text>*:

```
45 \newcommand*\Wikideref{\Wikiref{de}}
```

`\Wikienref{<lemma>}` is `\Wikideref`'s analogue for English:

```
46 \newcommand*\Wikienref{\Wikiref{en}}
```

`\Wikidedisambref{<lemma>}{<suffix>}` chooses a disambiguation according to `<suffix>` for the German Wikipedia, `\Wikiendisambref{<lemma>}{<suffix>}` for the English one:

```
47 \newcommand*\Wikidedisambref{\Wikidisambref{de}}
```

```
48 \newcommand*\Wikiendisambref{\Wikidisambref{en}}
```

7.3 Blanks and Umlauts in URLs and Anchors

`\underscorechar` seemed to be useful in macro definitions. The name was inspired by L^AT_EX's `\@backslashchar` and `\@percentchar`. However, I am now trying what happens without it. It occurred in `blog.tex` for the documentation of the `blog` package, but `\string_` seems to be a good replacement.

```
49 % \newcommand \underscorechar {}
50 % {\@makeother\_ \gdef\underscorechar{_}}
```

Anyway, in my notes I have a more elegant macro for providing “other” versions of special characters.

Guessing what `\underscorechar` was good for (2011-05-17): Wikipedia lemmas and anchors often or even *typically* contain *blank spaces*. The Wikipedia software usually converts them into underscore characters. Blank spaces in *lemmas* seem *not* to need treatment here in `texlinks`. However, Wikipedia also creates *anchors* from *section headings*, which typically contain blank spaces. This has been more difficult . . .

Likewise with umlauts: text encoding suffices for *lemmas*. I made `\urluml` for lemmas. But umlauts in *anchors* generated from *section headings* are different. While umlauts in *lemmas* are represented by sequences starting with a *percent* character, the anchors use a *dot* instead of the percent character. Therefore now `\ancuml{<char>}` is provided:

```
51 \newcommand*\ancuml}[1]{\csname ancuml:#1\endcsname}
52 \@namedef{ancuml:a}{.C3.A4}
53 \@namedef{ancuml:o}{.C3.B6}
54 \@namedef{ancuml:u}{.C3.BC}
55 \@namedef{ancuml:s}{.C3.9F}
```

What you read in the rest of the section is *wrong*, the commands are *dropped* for testing as of 2011/05/13. `\itwikideref` is an italic variant of `\wikideref`:

```
56 % \newcommand*\itwikideref}[2]{\wikideref{#1}{\textit{#2}}}
```

By analogy to `\Wikideref`, The following macros save you from typing the underscore (didn't spaces suffice sometimes?) and the round parantheses. Italic variant `\itwikienref` of `\wikienref` (`blog.sty` had `\emwikienref` instead):

```
57 % \newcommand*{\itwikienref}[2]{\wikienref{#1}{\textit{#2}}}
```

`\urluml{ascii-char}` as of 2010/05/25 (not sure if it ever worked or was actually needed):

```
58 % \newcommand*{\urluml}[1]{\csname urluml:#1\endcsname}
59 % \@namedef{urluml:a}{\#C3\#A4}
60 % \@namedef{urluml:o}{\#C3\#B6}
61 % \@namedef{urluml:u}{\#C3\#BC}
62 % \@namedef{urluml:s}{\#C3\#9F}          %% 2010/08/09
```

8 T_EX-related

8.1 CTAN

`\bytopicref{anchor}{text}` makes *text* a link to *anchor* of Jürgen Fenn’s Topical Index of the T_EX Catalogue. You find the *anchor* by clicking at the respective TOC entry on top of the page and then read the URL from the browser’s navigation display.

```
63 \newcommand*{\bytopicref}[1]{%
64   \httpref{mirror.ctan.org/help/Catalogue/bytopic.html\##1}}
```

(Example: `\bytopicref{html}{\acro{HTML}}` for HTML.)

`\tugctanref{path}{text}` makes *text* a link to a T_EX Archive directory or file *path*:

```
65 \newcommand*{\tugctanref}[1]{%
66   \httpref{tug.ctan.org/tex-archive/#1}}
```

`\ctanpkgref{pkg-name}` makes *text* a link to the CTAN package info page for the package *pkg-name*. `\CtanPkgRef{name}{Name}` is a variant for the cases where authors have a special idea *Name* using some capital letters when they describe their packages (ASCII versions of “Logos” such as BibT_EX) while the identifier *name* doesn’t allow capital letters. Also, *Name* may be a package from a *bundle* *name* where *name* has a description page while *Name* doesn’t have its *own* description page (such as `fifinddo`).

```
67 \newcommand*{\CtanPkgRef}[2]{%
68   \httpref{ctan.org/pkg/#1}{\pkgnamefmt{#2}}
69   \newcommand*{\ctanpkgref}[1]{\CtanPkgRef{#1}{#1}}
```

Instead of `\pkgnamefmt{pack-name}`, `blog.sty` had `\prg{pack-name}`, without a proper implementation. For typesetting, choosing `\pkgnamefmt` as `\textsf` seems to conform to common practice today. The following code may later be suppressed at some package options, as with the choice for `\httpref`:

```
70 \@ifdefinable\pkgnamefmt {\let\pkgnamefmt\@firstofone}
71 \AtBeginDocument      {\let\pkgnamefmt\textsf}
```

8.2 CTAN Announcements

`\ctanannref{<id>}{<text>}` makes *<text>* a link to the DANTE web page displaying a CTAN announcement. You find *<id>* by searching

`https://lists.dante.de/pipermail/ctan-ann/`

and then reading the URL. *<id>* is composed as *<year>-<month>/<6-digits>.html*.

```
72 \newcommand*\ctanannref[1]{%
73   \httpsref{lists.dante.de/pipermail/ctan-ann/#1}}
```

`\ctanannpref{<id-code>}{<text>}` is a variant of `\ctanannref` where in place of *<id>* you only type the third and fourth digit of the year, then a -, then the (arabic) number of the month, then another -, and then the actual internal identifier (a number of six digits preceding `.html` of the URL).

```
74 \newcommand*\ctanannpref[1]{%
75   \ctanannref{TL@piper@parse#1/.html}}
76 \def TL@piper@parse#1-#2-#3/{%
77   #1-%
78   \ifcase #2\or
79     January\or February\or March\or   April\or
80     May\or June\or   July\or   August\or
81     September\or October\or November\or December% 2010/12/23
82   \fi
83   /#3}
```

8.3 TUG

`\tugref{<path>}{<text>}` makes *<text>* a link to *<path>* on domain `tug.org`:

```
84 \newcommand*\tugref[1]{\httpref{tug.org/#1}}
```

8.3.1 texhax

`\texhaxref{<id>}{<text>}` makes *<text>* a link to the TUG web page displaying a texhax posting. You find *<id>* by searching `tug.org/pipermail/texhax/` and then reading the URL. *<id>* is composed as *<year>-<month>/<6-digits>.html*.

```
85 \newcommand*\texhaxref[1]{\tugref{pipermail/texhax/#1}}
```

`\THref{<id>}` saves you from choosing *<text>* and uses `texhax` instead.

```
86 \newcommand*\THref[1]{\texhaxref{#1}{texhax}}
```

(It was `\prg{texhax}` in `blog.sty`, to have something logo-like, without a good idea how to implement it.)

`\texhaxpref{<id-code>}{<text>}` is a variant of `\texhaxref` where in place of *<id>* you only type the third and fourth digit of the year, then a -, then the (arabic) number of the month, then another -, and then the actual internal identifier (a number of six digits preceding `.html` of the URL). I made this macro because I prefer typing to copying from the URL.

102	v0.3	2011/02/10	[blog]; \urlpkgfoot
103	v0.4	2011/04/27	doc. \tugbartref\ corrected
104		2011/04/30	shortened link in \tugbartref
105		2011/05/03	\TL@piper@parse, tried \ctanannref
106		2011/05/13	reworking Wikipedia, arbitrary languages
107		2011/06/27	doc.: \acro; \httpsref, \ctanannref
108		2011/07/23	doc.: typo \acro{TUG}, 'Almost all', page breaks;
109			\Wikidisambref: different order of arg.s
110		2011/08/18	doc.: \acro with UK; wikibooks
111		2011/08/27	doc. \acro with URL and PDF;
112			more doc and code changes for https
113			