

srcltx.sty · srctex.sty

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Abstract

This package provides source special insertion into DVI files, allowing to jump from the DVI file to the `.tex` source and back (given a DVI viewer that supports this). Additionally, it provides hooks for error tracking from the `.log` file for the WinEdt shell.

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1 Warning

Source specials may alter the paragraph spacing in your document. Always process the final version of your document with this package commented out, or deactivated: `\usepackage[inactive]{srcltx}`.

2 Usage

To use the package with L^AT_EX, put the line
`\usepackage{srcltx}`
into the preamble of your document. For T_EX, use

`\input srctex.sty`

instead. This will insert source specials at every start of a paragraph of your document and at every math environment (see the ‘Options’ section below for how to customize this). A source special is only inserted if there hasn’t already been one on the same source input line.

For editors and DVI viewers that support it, source specials can be used for ‘inverse search’ between the (La)TeX source and the DVI file: The `.dvi` viewer can open a text editor with the file (and line) of the corresponding place in the `.tex` source (also called ‘reverse search’), and the editor can invoke the previewer with the corresponding place in the `.dvi` file (‘forward search’). Examples for DVI previewers supporting this are: The Windows viewers YAP and Dviwin, and the Unix viewers `xdvi(k)` (versions ≥ 22.38) and KDVI (KDE ≥ 3.0). Editors supporting inverse search are e.g. WinEdt, (X)Emacs, nedit and vim.

The package was originally written for use with the WinEdt shell, and it offers some special features to customize WinEdt’s error tracking. These are shown in the example in figure 1 on page 3.

The specials inserted by this package have the following format, which should be compatible with all DVI viewers:

`\special{src:line-number_filename}`

2.1 Options

The following options are only available for the L^AT_EX₂e version of this package. Unless noted otherwise, the Plain T_EX version `srctex.sty` has a command `\SRC<foo>` for each option `<foo>`, e.g. `\SRCnopar` replaces the ‘`nopar`’ option.

active/inactive With the `inactive` option, source specials are disabled, but the source file tracking for WinEdt is still active.

The `active` option is only useful to override a global `inactive` option.

For `srctex.sty`, use `\SRCOKtrue` and `\SRCOKfalse` instead.

nowinedt Turn off the source file tracking used by WinEdt (the `:<+ filename` line in the output every time an input file is opened, and the `:<-` line when it’s closed again).

dviwin Use specials in a format suitable for dviwin (without a space between the line number and the filename).

debug Print debugging information on current input file and the input file stack.

The following options can be used to turn off source specials for certain environments; try these options if you encounter problems with the default behaviour:

nopar Don’t hook into `\everypar`.

nomath Don’t hook into `\everymath`.

BROKEN

nodisplay Don’t hook into `\everydisplay`.

```

\documentclass{report}
\usepackage{srcltx}
%
% ... Preamble ...
%
\begin{document}
%
% ... Title, Author etc. ...
%
\WinEdt{?0000} % Do not process any errors (overful/underful boxes)
% ... Preface etc. ...
\WinEdt{?1111} % Process all types of errors from here on
\include{chapter1}
\include{chapter2}
\include{chapter3}
\bibliographystyle{plain}
\bibliography{xbib}
\end{document}

```

Figure 1: Example for using `srcltx.sty` with the WinEdt error tracking features.

2.2 Commands

`\Input{<filename>}` In order to keep track of the current filename, the \LaTeX commands `\include{<filename>}` and `\input{<filename>}` are overloaded (note the braces enclosing the filename argument). The `\input` command where the filename can be specified without any delimiters is a \TeX primitive command that can not be overloaded easily. Therefore the package provides an alternative command `\Input` which you should use in Plain \TeX instead of `\input` if you want the specials in such files to point to the correct filename. For \LaTeX , you should always use the version with braces: `\input{<filename>}`. *Note:* For WinEdt, you will also need to specify the file name extension (e.g. `.tex`) in the argument of this command.

`\MainFile` Usually the \TeX primitive `\jobname` contains the name of the “main” \TeX file, without the filename extension `.tex`. Accordingly, `\MainFile` is defined as `\jobname.tex`. If you have a very awkward \TeX implementation that already adds the extension to `\jobname`, you compensate for this by redefining this command as follows (after loading `srcltx.sty`):

```
\def\MainFile{\jobname}
```

`\srcIncludeHook` This is a hook that is called by the `\include` command. It takes the argument of that command and sets `\CurrentInput` to that argument (or a modified version thereof); the content of `\CurrentInput` is used as file

name in the source specials. This hook can be used to write a customized file name into the source specials. For example, if the `.tex` source file is automatically generated from some master document, the source specials in the DVI file could point to that master document instead of the generated `.tex` file.

Its default definition is:

```
\newcommand*\srcIncludeHook[1]{%
  \protected@xdef\CurrentInput{#1.tex}}
```

(for \LaTeX , similar with `\def` for \TeX).

`\srcInputHook` This is similar to `\srcIncludeHook`, but for the `\input` command.

Its default definition is:

```
\newcommand*\srcInputHook[1]{\src@getfilename@with@ext{#1}}
```

(for \LaTeX , similar with `\def` for \TeX); `\src@getfilename@with@ext` will append a `.tex` extension to the filename if it doesn't already end with `.tex`.

`\SRCOKtrue`, `\SRCOKfalse` You can use these commands to activate/deactivate source specials at any place in your document, e.g. when you experience problems with some special constructions (see also ‘Bugs and Restrictions’ in section 3).

3 Bugs and Restrictions

Since this macro package overloads some internal \LaTeX commands, it is not as robust as one might wish, and might interact badly with other packages. Furthermore, the spacing might be altered by using the package; for example, with the `amsmath` documentation `amsl.doc.tex`, the bibliography is shifted from the bottom of page 31 to page 32. Therefore you should comment out the package or disable it with the `inactive` option when preparing the final version of your document.

A somewhat more robust method of inserting source specials is to use \TeX (the program) instead of a macro solution. Some \TeX implementations provide a command line option for this.¹ You can still load `srcltx.sty` with the `inactive` option to enable the WinEdt error tracking features when needed.

This section lists known incompatibilities with other packages and workarounds for these. If you know of any other problems, please send a bug report to [<stefanulrich@users.sourceforge.net>](mailto:stefanulrich@users.sourceforge.net).

`soul.sty`: Active source specials inside the `soul` tokenization routine may lead to a ‘reconstruction failed’ error. As a workaround, the internal command `\SOUL@` is overloaded by `srcltx`. With the Plain \TeX version, `srctex.sty` needs to be loaded *after* `soul.sty` to make this work.

¹E.g. a `-src` option is available in Mik \TeX from version 1.20 upwards, or in `te \TeX` from version beta-20011103 or `te \TeX -2.0` upwards. See the manual of your \TeX implementation for details on this.

`syntax.sty`: This style does extensive parsing of the input inside its ‘grammar’ environment, which is incompatible with `srcltx.sty`.

4 Related Packages

Heiko Oberdiek’s `vpe.sty` provides source specials for forward search in PDF files. To our knowledge there exists no implementation for reverse search with PDF viewers, or inverse search in Postscript documents.

5 History

This package was originally written by A. Simonic, the author of the WinEdt Shell, to implement source file tracking and DVI source specials for \TeX . D. P. Carlisle and B. K. Horn have contributed bug fixes. Further changes and conversion to `ltxdoc` format by S. Ulrich. Thanks for patches and suggestions to: A. Cherepanov, J. Rawsley, D. Kastrup, D. Arseneau, M. S. Grønsløth and R. Hemmecke.