

\LaTeX -Mik: \LaTeX -Support for GVim on Win32-systems

v0.5, December 26, 2003

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Abstract: Vim, one of the most complex text editors is also available on win32 systems. Vim has excellent syntax highlighting for \LaTeX and BibTeX files. \LaTeX -Mik has been written for GVim, the graphical version of Vim. It supports authors using MikTeX, a popular win32 \TeX / \LaTeX -implementation. Only minor changes of the script are required to make it suitable for other \TeX implementations, e.g. **fp \TeX** .

1 System requirements

At least, installation of MikTeX¹ on a win32-system including **pdfL^AT_EX** and **dvips** is required. For converting L^AT_EX-documents to HTML the script calls **tth**². For printing PostScript documents **Ghostview** and **Ghostscript** should be installed.

2 Installation

Please copy the file `latex-mik.vim` into the vim plugin-directory. If you open a file with the extension `.tex` or `.bib`, the L^AT_EX-menu appears.

3 L^AT_EX-menu options

3.1 BibT_EXEntry

The Options of this menu insert empty templates for BibT_EX document types into a `.bib` file³. Thus `LaTeX→BibTeX→Article` inserts

```
@article{,
author = {},
title = {},
year = {},
journal = {},
OPTpages = {},
OPTvolume = {},
OPTmonth = {},
OPTnumber = {}
}
```

into the text: the template for `@article`-entries. Fields beginning with `OPT...` are optional in the context of this document type. The last field of a well-formed `.bib`-file is not closed by a comma (,). Also the other document types: `book`, `booklet`, `inbook`, `incollection`, `inproceedings`, `manual`, `mastersthesis`, `misc`, `phdthesis`, `proceedings`, `techreport`, `unpublished` are implemented.

3.2 Environment on region, Empty environment

`LaTeX→Environment on region` only works if a region is selected “linewise visual” (with ‘V’ in Vim’s command mode). With a region selected “characterwise visual” (‘v’) the script generates the error message: “No text highlighted linewise”. To use this command, select a region of lines with ‘V’ and enter the name of the environment and the prompt, e.g. `center`. `LaTeX→Empty environment` generates an empty environment. As an example, `center` inserts

```
\begin{center}
```

¹<http://www.miktex.org>

²<http://hutchinson.belmont.ma.us/tth/>

³A BibT_EX database usually has the filename extension `.bib`

```
\end{center}
```

itemize inserts

```
\begin{itemize}
  \item
\end{itemize}
```

3.3 Commands on region, Empty Commands

LaTeX→Commands on region only works if a region is selected “characterwise visual”, with a region selected “linewise visual”, the script generates the message “No text highlighted characterwise”. LaTeX→Empty commands generates an empty command.

3.4 Umlaute

In L^AT_EX-documents “Umlaut”-characters (äöüÄÖÜ) and ‘ß’ are inserted literally by default. If you select LaTeX→Umlaute→Normal TeX, typing ä inserts \“a. Default behaviour is restored with LaTeX→Umlaute→Normal TeX. LaTeX→Umlaute→German TeX mapping prints “a for a typed ä, LaTeX→Umlaute→BibTeX mapping prints {\“a}, LaTeX→Umlaute→German Umlaut mapping converts ä to ae.

3.5 Process L^AT_EX-projects

In the following description, a L^AT_EX-project is understood either as a single L^AT_EX-file (together with a .bib-file, if it exists) or as the main file and the files included with \input{} or \include{} commands as in

```
\documentclass{article}
\begin{document}

\input{fileOne}
\input{fileTwo}
\input{fileThree}

\end{document}
```

After opening one of the files of a project and before L^AT_EXing and/or viewing the project you will have to tell the script the project name, therefore select LaTeX→Projectname. If you are currently editing the main file, you may confirm the prompt (Enter project name [default current file]:) with [Enter], if another file of the project is edited you will have to enter the name of the main file without the extension⁴. Then, with LaTeX→LaTeXProject you will compile the project (produce a .dvi-file), LaTeX→BibTeXProject runs BibT_EX, LaTeX→IndexProject runs makeindex, LaTeX→ViewFile calls the dvi-viewer yap and makes it jump to the correct position, LaTeX→PDFLaTeX calls PDFL^AT_EX to

⁴if the main file is myfile.tex, please enter myfile; generally the main file is the T_EX file with the \documentclass statement

produce a PDF-file, `LaTeX`→`dvips` calls `dvips` to produce a PostScript file, `LaTeX`→`gsview` opens the graphical interface of the ghostscript-interpreter, `LaTeX`→`LaTeX to HTML` generates a HTML file with `tth`⁵.

⁵available through <http://hutchinson.belmont.ma.us/tth/>