LaTeX2RTF

A converter from LaTeX to RTF
Edition 0.7.7
for program version 2.2.0

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1 Introduction

LaTeX2RTF is a translator program from LaTeX text into "rich text format" files. These files are commonly referred to as RTF files. RTF is a published standard format by Microsoft. This standard can be ambiguous in places and Microsoft ignores parts of the standard it finds inconvenient, but RTF is widely used by many WYSIWIG text editors and is supported by Microsoft Word and most text processors.

LaTeX2RTF translates the text and as much of the formatting information from LaTeX to RTF. Be forewarned that the typeset output is not nearly as good as what you would get from using LaTeX directly. So, why bother translating? Consider,

1. You use LaTeX and hate everything beginning with MS-... Nevertheless, you have to share your documents with people who don't even know that there are alternatives to MS-...

2. You know somebody who frequently sends you very fine LaTeX documents. Unfortunately, you are "on the other side" and need to import her files, steal some part, and then desktop publish it in your fine MS-... environment.

3. You like LaTeX and BibTeX . You interact with the rest of the world. You know someone that wants to include your writing in a Word document.

There are drawbacks to the conversion process. In fact, don't expect any LaTeX file to be converted as you would like, don't expect it to be converted without errors or warnings, and don't be especially surprised when it doesn't convert at all. LaTeX2RTF is known to have many bugs and many missing features. Paradoxically, this number seems to grow more and more with each day. However, we can categorically state that there are some special cases in which a LaTeX file will be translated to RTF satisfactorily by LaTeX2RTF —This was sort of disclaimer, ok? OK!

LaTeX is a system for typesetting text and therefore it focuses on the logical structure of a document, whilst RTF is meant to be a transport format for a family of Desktop Publishing Software, dealing mostly with the design of a text.

Although the commands and styles in LaTeX are much more flexible and standardized than in RTF, only a small subset of commands has been implemented to date (see Section 8.1 [Unimplemented Features], page 29).

Some of the capabilities of LaTeX2RTF are restricted in scope or buggy (see Section 8.3 [Known Bugs], page 29).

RTF is a moving target, because Microsoft does not stop inventing new extensions and features; consequently you cannot view newer RTF files with older word processors. The syntax and semantics of RTF are somewhat artistic, i.e., you can generate a syntactically correct RTF file that cannot be displayed by some/most word processors. For more details on RTF the specification consult the links at `http://latex2rtf.sf.net/`

2 Installation

2.1 General

The documentation of the program is found in the 'doc/' directory in the file 'latex2rtf.texi' in the GNU TeXInfo format. For your convenience, you can find HTML and PDF versions of the manual there as well.

Note: In this manual, the terms "directory" and "folder" are used interchangeably.

2.2 Obtaining LaTeX2RTF

LaTeX2RTF is available for many Unix Platforms, for the Macintosh, and for MS-DOS, including all versions of MS Windows.

The latest version of LaTeX2RTF is available at SourceForge and — with some delay — on CTAN sites: e.g., http://www.dante.de or http://www.ctan.org.

The DOS package will also run under all MS Windows versions up to Vista, except 64bit systems. It requires an i386 processor or better.

It should only be used on older Microsoft systems.

For Win9x, ME, NT, or newer, you should use the win or win-NO-GUI package.

The win-NO-GUI package only runs under Win32 (Win9x, ME, NT, 2000, XP, 2003, Vista, probably also Win7). From LaTeX2RTF version 2.0.0 up it also runs on 64bit systems.

The win package is the win-NO-GUI package plus graphical user interface (GUI) shell (l2rshell) and installer.

It only runs under Win NT, 2000, XP, 2003 and Vista, probably also Win7.

From LaTeX2RTF version 2.0.0 up it also runs on 64bit systems.

The win64 package (only LaTeX2RTF version 1.9.19) is the win package but with 32bit versions of the shell utilities so that it also runs on 64bit systems. From LaTeX2RTF version 2.0.0 up, there is no separate win64 package, as the win32 package will also run on 64bit systems.

There are a few people working on LaTeX2RTF , and some more make contributions, coordinated by Wilfried Hennings (texconvfaq "at" gmx.de). See the SourceForge project pages for the latest news.

2.3 UNIX

To install,

1. Edit 'Makefile' for your local configuration. In particular, pay attention to the PREFIX variable. If you do not have root access you might wish to set the makefile variable PREFIX to be your home directory.

   On some machines the cc compiler will issue errors. Therefore the default compiler command in the Makefile is CC=gcc.

2. As of version 1.9.13, LaTeX2RTF supports conversion of LaTeX equations to bitmaps using the shell script 'latex2png', found in 'scripts/'. 'latex2png' requires that both LaTeX and 'ImageMagick' are installed. LaTeX2RTF will translate documents without a working 'latex2png', but some features will be missing. You can verify that the 'latex2png' script is working by typing make in the 'scripts/' directory.

3. `make`

   If this is not your first time installation, you may want to preserve your old configuration ('`*.cfg`') files. Copy them to a safe place before installing.

   On IBM AIX, the IBM make utility does not support some of the commands used in Makefile. In this case use `gmake` (from GNU) instead.

   Sun has decided to support the XPG4 standard on Solaris by an alternative set of binaries. To allow bitmap conversion of equations, two things are needed. First, change the first line of latex2png to `#!/usr/xpg4/bin/sh` Second, define the XPG4_GREP environment variable accordingly, for bash-like shells `XPG4_GREP=/usr/xpg4/bin/grep; export XPG4_GREP` or for tsch-like shells `setenv XPG4_GREP /usr/xpg4/bin/grep`.

4. `make install`

   If your `mkdir` doesn't support the '`-p`' option, then create the necessary directories by hand and remove the option from the `$MKDIR` variable. If you have other problems, just copy '`latex2rtf`' and '`latex2png`' to a binary directory, and move the contents of the '`cfg/`' directory to the location specified by `$CFG_INSTALL`.

5. `make check`

   [OPTIONAL] This tests LaTeX2RTF on a variety of LaTeX files. Expect a whole lot of warnings, but no outright errors. (On IBM AIX, use `gmake check`.) Note that this will check the basic functionality of the '`latex2png`' script, and then that of '`latex2rtf`'.

6. `make install-info`

   [OPTIONAL] This installs '`.info`' files for use with the `info` program.

You no longer need to define the environment variable `RTFPATH`. This is only necessary if you move the directory containing the '`.cfg`' files. Just define `RTFPATH` to be the path for the new location of the '`cfg`' directory.

2.4 DOS

The UNIX and Mac packages do not contain an executable for DOS or Windows. You may compile it yourself (with djgpp or MinGW) or get the
DOS package as file '`latex2rtf-x.x.x_dos.zip`' (where x.x.x is the version number)
or the Windows package as file '`latex2rtf-x.x.x_win-NO-GUI.zip`' (no installer, no GUI)
or file '`latex2rtf-x.x.x_win.zip`' (with installer and GUI)
from SourceForge

The DOS distribution contains a precompiled executable which should run under plain DOS and also in the command prompt (or "console") of any MS Windows system including Vista but not on 64bit systems.

To install the DOS or Windows package of LaTeX2RTF , extract all files from the zip archive, preserving the folder structure (winzip: check "use folder names"), preferably to '`C:\l2r`', or under Windows, to your "Program Files" folder (which ever it is named in your system) because then it will find its cfg files by default.
If you extracted them to another folder (e.g. '`C:\my_files\l2r`'), either edit the file '`L2RPREP.BAT`' and change the folder '`C:\l2r`' to where you put them, or specify the path

to the cfg folder in the command line.
Avoid blanks in folder and file names!

Make sure that the folder containing the file 'L2RPREP.BAT' is in your search path, or put this file into a folder which is in your search path.
To display the current search path, enter 'PATH' from the command prompt (with no arguments).

Under plain DOS, conversion of equations or figures to bitmaps is not possible because Ghostscript and ImageMagick are not available for plain DOS.

2.5 Win32 systems

To install LaTeX2RTF on a Win32 system (WinNT, Win2000, WinXP, WinVista), download the win package, execute the 'latex2rtf-x.x.x_win.exe' (where x.x.x is the version number) and follow the instructions.

Note: The installer and GUI shell do not support Win9x and WinMe since LaTeX2RTF v.1.9.17. If you have one of these systems, you should use the win-NO-GUI package (1.9.19 and up) of LaTeX2RTF .

To start the program double-click the LaTeX2RTF icon, or drag and drop a '.tex' file onto the icon.

If your LaTeX document refers to external graphic files, e.g. eps, or you want to use the option to convert equations to bitmaps, you must have LaTeX, ImageMagick and Ghostscript installed. These programs are freely available for download at http://www.miktex.org/, http://www.imagemagick.org and http://www.ghostscript.com

The following versions were available at the time of writing and used together with LaTeX2RTF version 2.1.x:
- MikTeX 2.8
- Ghostscript 8.71
- ImageMagick-6.6.2-4-Q8-windows-dll.exe

If MikTeX, ImageMagick and Ghostscript are installed, the paths to their executables are detected automatically. If for any reason this doesn't happen, these paths can be specified manually in the "Environment" tab of the LaTeX2RTF GUI shell window.

If you need to start LaTeX2RTF not from its own shell but from another Windows application, you need to add the folder containing the latex2png script and the helper programs to the search path.
Some applications (e.g. Lyx) allow to temporarily add the path by specifying it in the options.
If this is not possible, you can add the latex2rtf folder to Windows' default path like follows:

To add a folder – e.g. C:\Program Files\latex2rtf – to the search path:

- Note that the folder name "Program Files" contains a blank. This would lead to some problems as some parts of the latex2rtf program package interpret the blank as a parameter delimiter. Therefore in the following example the folder name "Program Files" is replaced by its DOS equivalent "PROGRA~1" which has the additional effect that this is similar for several if not all European languages.

- Win95, Win98, WinME

- Open the file 'C:\AUTOEXEC.BAT' either with Edit (DOS) or with Notepad (Windows).
- At the end of that file, add the line 'PATH=C:\PROGRA~1\latex2rtf;%PATH%'
- Save the file to its original location. Shutdown and reboot the PC.

- WinNT, Win2000, WinXP
  - Right-click "My Computer" (German: "Arbeitsplatz"), then select "Properties";
  - NT: Click the "Environment" tab;
    XP: Click the "Extended" tab, then the "Environment variables" button;
  - Find the line beginning with 'PATH=' and insert the string
    'C:\PROGRA~1\latex2rtf;'
    so that the complete line looks like
    'PATH=C:\PROGRA~1\latex2rtf;C:\WINDOWS;...'
  - Click "OK"

Either the folders where TeX, ImageMagick and Ghostscript are installed must also be in your search path, or you must edit the file 'L2RPREP.BAT', ensure that the pathes in this file point to the folders where TeX, ImageMagick and Ghostscript are installed on your machine, and call 'l2rprep' before calling 'latex2rt'.
Or you edit 'l2r.bat' and call 'l2r' instead of calling 'latex2rt'.

When equations are to be converted to bitmaps, for each equation LaTeX2RTF first writes a temporary l2r_nnnn.tex file to disk which consists of only the equation to be converted. It then sends the call for '"bash latex2png l2r_nnnn.tex"' to the operating system.
In previous versions of latex2rtf, some users got the message "Out of environment space" (can occur only under Windows 95, Windows 98 or Windows ME); this should be solved now by using bash.exe instead of command.com.

2.6 Macintosh

If you want a MacOS X version, make sure that you have installed the developer tools CD that is appropriate for your OS version, and then follow the directions above for a UNIX installation. Alternatively you can install using fink http://fink.sourceforge.net/ or as an i-installer package http://www.rna.nl/ii.html.

As of 2006-01-30 there also is a GUI shell for Macintosh.
See http://www.inf.ethz.ch/personal/fischerk/LaTeX2rtf/index.html

There is a PPC port of an old version 1.9k for Classic MacOS LaTeX2RTF . To convert a LaTeX file using this version, drag the file onto the LaTeX2RTF icon. The translation is best if there are '.aux' and '.bbl' files in the same folder as the '.tex' file to be converted. These should be generated using LaTeX and 'bibtex'.

2.7 Problems Compiling

The code for LaTeX2RTF is standard ANSI C. Some possible pitfalls are
- Not correctly defining your compiler in the Makefile. The default is to use gcc.
- Encountering errors because the compiler options. During development all compiler warnings are turned on. However, different compilers have different interpretations of

'`-Wall`' and may generate errors that were not found in a different development system. Please report these, but a quick fix is to remove all compiler options.

2.8 Problems with `make check`

All the files in the '`test`' directory are converted (with varying degrees of success) using LaTeX2RTF and are tested before most CVS check-ins and with all released tarballs. There will be many warning messages, but there should be no actual error messages. If you do not have a working latex2png script, then some of the files will fail to be translated.

3 Using LaTeX2RTF

3.1 General Assumptions

LaTeX2RTF assumes that the '.tex' file you want to convert is a valid LaTeX document. The chances of a successful LaTeX2RTF conversion are slightly better than the proverbial snowball's if the '.tex' file doesn't latex properly. Use LaTeX to find and correct errors before using LaTeX2RTF .

To correctly convert font names you must edit the 'fonts.cfg' configuration file. This file is used to specify the needed font names and how the LaTeX default font names should be converted to RTF (see Section 5.6 [Font Configuration], page 23). LaTeX variables and user defined commands are not evaluated. They will be simply ignored. To let LaTeX2RTF know the names of variables you can add them in the 'ignore.cfg' file (see Section 5.5 [Ignore Command], page 22).

The environment variable RTFPATH may contain a search path for the support files (all files ending in '.cfg'). If no file is found during the search in the search-path or if the environment variable is not set, the compiled-in default for the configuration-file directory is used. If the files are not found at all the program aborts.

In the DOS and Windows versions the search path is separated by ';' in the Unix version by ':'. For the paths themselves apply '\' and '/'. A separator may appear at the beginning or ending of RTFPATH.

Make sure that the configuration files are in the correct directory (or folder). LaTeX2RTF will need at least 'fonts.cfg', 'direct.cfg', 'ignore.cfg', 'english.cfg'. You may have to change one ore more of them to suit your needs (see Chapter 5 [Configuration], page 21).

See Section 8.2 [Missing options], page 29, for actual implementations irregularities.

See Section 8.4 [Reporting Bugs], page 29, for information on how to reach the maintainer.

3.2 LaTeX2RTF Options

The LaTeX2RTF command converts a LaTeX file into RTF text format. The text and much of the formatting information is translated to RTF making the new file look similar to the original. The command line syntax is:

```
latex2rtf [-options] inputfile[.tex]
```

or for the DOS and Windows versions:

```
latex2rt [-options] inputfile[.tex]
```

The -options may consist of one or more of the following

-a auxfile

> specify an '.aux' file (for table and figure references) that differs from 'inputfile.aux'. If this is omitted, the name of the inputfile with the suffix replaced '.aux''will be taken. You must provide both files ('.tex' and the '.aux') to be able to convert cross-references in a LaTeX file. The '.aux' is created by running the 'inputfile.tex' through latex.

-b bblfile

> Unless an 'bblfile' is specified with the -b option, LATEX2RTF uses a 'inputfile.bbl'. The 'bblfile' file is used for citations and is typically created by running 'inputfile.aux' through 'bibtex'.

-C codepage

> used to specify the character set (code page) used in the LATEX document. This is only important when non-ansi characters are included in the LATEX document. Typically this is done in a LATEX 2_ε file by using \usepackage[codepage]{inputenc} and in this case you need not specify the -C codepage option. If NO \usepackage[codepage]{inputenc} is in the LATEX 2_ε file, you must inform the converter about the codepage by the -C codepage option. You may select any of the following code pages: ansinew, applemac, cp437, cp437de, cp850, cp852, cp865, decmulti, cp1250, cp1252, latin1, latin2, latin3, latin4, latin5, latin9, next. The default behavior is to use ansinew (code page 1252). Cyrillic support includes conversion of koi8-r, koi8-u, cp1251, cp855, cp866, maccyr, and macukr encodings.

-d debug_level

> The '-d' option determines the amount of debugging information to send to stderr while translating. debug_level=0 means only Errors, '1' Warning Messages (default) also. The debug_level can go as high as '7' for insane amounts of debugging fun. Warnings and error messages are output to stderr and by default listed in the console window. They can be redirected to a file "latex2rtf.log" by appending 2>latex2rtf.log to the command line.

-D dots_per_inch

> used to specify the number of dots per inch for equations converted to bitmaps. This value is also used when picture environments are converted to bitmaps as well as when EPS graphics are converted to png files. The default value is 300 dots per inch.

-f#   where # selects which fields to use during conversion:

> **-f0**   do not use fields in RTF. This is handy when primitive RTF editors are being used to view the RTF output.
>
> **-f1**   use fields for equations but not \ref and \cite.
>
> **-f2**   use fields for \ref and \cite but not equations. This will be useful for versions of OpenOffice that import cross-references properly (as of Sept 2003 in a soon-to-be released version) but do not properly handle fields in equations.
>
> **-f3**   use fields when possible. This is the default and is most useful when the RTF file is being exported to be used in Word. This retains the most information from the original LATEX file.

-F   use LaTeX to create bitmaps for all figures. This may help when figures are not translated properly with the default settings. This typically requires a functional version of ImageMagick on your machine to work properly.

-h   a short usage description

-i language

> used to set the idiom or language used by the LaTeX document. Typically, this is specified in a LaTeX 2ε document by including `\usepackage[language]{babel}` where `language` is one of the languages supported by the `babel` package. All languages listed in the babel system are supported so far as translations for "Chapter," "References," and the like. Furthermore, some commands found in the style files for german, french, russian, and czech style are supported (see).

-l

> same as '`-i latin1`' (Note that the default behavior is to use '`ansinew`' which is a superset of '`latin1`'). Included for backwards compatibility.

-M#

> where # selects the type of equation conversion. Use

> -M1   convert displayed equations to RTF

> -M2   convert inline equations to RTF

> -M4   convert displayed equations to bitmap

> -M8   convert inline equations to bitmap

> -M16   insert Word comment field that contains the original equation text

> -M32   insert the raw latex equation delimited by `$ ... $` for inline equations and by `\[ ... \]` for displayed equations.
> This is useful when using version 6 of the MathType equation editor, which converts typed or pasted TeX code into a MathType equation.
> Probably this could also be useful for use in OpenOffice, as OO has an equation syntax which partially resembles TeX syntax.

> These switches can be combined to get different effects. Handy examples are

> -M3   convert both inline and displayed equations to RTF (default)

> -M6   convert inline equations to RTF and displayed equations to bitmaps

> -M12   convert both inline and displayed equations to bitmaps

> Bitmap conversion requires that you have installed a working latex2png script. Producing bitmaps is slow.
> When running the DOS version, conversion to bitmaps works for the first 26 equations but fails for the rest with the message
> "latex2png: pipe error: Too many open files (EMFILE)".
> This is probably a bug in the djgpp 2.04 compiler; I chose this version because of its better support of long filenames under Win32 (95, 98, ME, 2000, XP, Vista).
> The Windows version, compiled with MinGW, successfully converts at least 500 equations to bitmaps.

-o outputfile

> Unless an '`outputfile`' is specified with the `-o` option, the resulting RTF filename is formed by removing '`.tex`' from the '`inputfile`' and appending '`.rtf`'.

-p   Escape parentheses in mathematical formulas. This has no effect unless EQ fields are being generated. When this option is used, then a '(' or ')' that appears in an EQ field will be preceded by a backslash. Despite documentation to the contrary (which says that all parentheses should be escaped), adding escapes usually produces a worse result than doing nothing. If Word displays some formulas with parentheses as "Error!", you might try this option as a last resort. See also the -S option.

This is an option because it will break typesetting equations with non-matching parentheses (because an unmatched unquoted parenthesis would terminate the field).

-P /path/to/cfg

used to specify the folder (i.e. directory) that contains the `.cfg` files and/or the folder that contains the latex2png script.
Unix, Mac: The folder that contains the latex2png script must be prepended by a ":".
DOS, Windows: The scripts folder is not used, the scripts are always taken from the search path, therefore the folder containing the scripts and the helper programs must be the first in the search path. You can either add it to the search path permanently or add it temporarily by calling l2rprep.bat before starting conversions.
If any of the folder names contains a blank, the folder string must be enclosed in single (Unix, Mac) or double (DOS, Windows) quotes.
Examples:
(Unix:) `latex2rtf -P ./cfg/:../scripts/ foo`
(DOS/Windows:) `latex2rt -P "C:\Program Files\latex2rtf\cfg" foo`
Note that without specifying the -P option, LaTeX2RTF tries to find its cfg files in the following locations:
1. the folder specified by the environment variable `RTFPATH`, if this variable exists;
2. The folder `%PROGRAMFILES%\latex2rtf\cfg`, if the variable `PROGRAMFILES` exists – this is the folder in which LaTeX2RTF is installed by the Windows GUI installer with default settings;
3. the folder specified at compilation time by the variable `CFGDIR`. This is set in the Makefile. The DOS version is compiled with `CFGDIR=C:/l2r`, the Windows version with `CFGDIR=C:/PROGRA~1/latex2rtf`.

-se#   selects the scale for equation conversion, where # is the scale factor (default 1.00).

-sf#   selects the scale for figure conversion, where # is the scale factor (default 1.00).

-t#   where # selects the type of table conversion. Use

           -t1   convert tables to RTF (default)

           -t2   convert tables to bitmaps

-v or -V   prints version information on standard output and exits.

-S   used to specify that semicolons should be used to separate arguments in RTF fields (instead of commas). Typically this is needed when the machine that opens the RTF file has a version of Windows that uses ',' for decimal points.

-T /path/to/tmp
    used to specify the folder where to put temporary files. The path can be absolute, e.g. /path/to/tmp or relative to the folder where the .tex input file is in, e.g. tmp or ./tmp.
    If you call LATEX2RTF from the commandline (e.g. under Linux or when called as export filter by LyX), make sure that the tmp folder exists. Only the LATEX2RTF Windows shell tries to create the tmp folder, the command line program doesn't.

-W   includes warnings directly in the RTF file

-Z#   add the specified number of extra } to the end of the RTF file. This is useful for files that are not cleanly converted by LATEX2RTF .

With no arguments other than switches starting with a "-", LATEX2RTF acts as a filter, i.e., it reads from stdin and writes to stdout. In addition, diagnostic messages are sent to stderr. If these standard channels are not redirected using < and >, then the input is read from the command line, and both output and error messages are printed on the screen. To redirect warnings and error messages to a file "latex2rtf.log", append 2>latex2rtf.log to the command line.

If a non-switch argument is present, LATEX2RTF assumes it is the name of the input file. The file must have extension ".tex" but the extension is optional. The output file is constructed from the input file name by removing the extension ".tex" and adding ".rtf".

3.3 Debugging

With the '-d' option you can specify how much processing information LATEX2RTF reports. If there is a logfile specified the output goes to this file. Nonetheless Warnings and Errors are logged to stderr always. They can be redirected to a file "latex2rtf.log" by appending 2>latex2rtf.log to the command line.

Possible values of '-d' are

0. only errors.
1. Translation Warnings (default).
2. shows preparsing of sections
3. Reasonably high level debugging messages
4. Show all function calls
5. Show each character as it is processed
6. Show processing of characters as they are output as well

4 Features

In this chapter you find what styles is LATEX2RTF supposed to translate correctly to RTF.

4.1 LaTeX2e

LATEX2RTF understands most of the commands introduced with LATEX 2$_\varepsilon$. It translates both the old 2.09 version of `\documentstyle[options]{format#}` and the newer `\documentclass[options]{format}`.

4.2 Unicode Support

As of version 1.9.17, LATEX2RTF has limited unicode support. LATEX files that use unicode sequences are just emitted directly into the RTF file.
Symbols and odd characters in math sequences may also be converted to a unicode sequence. Some of them need the STIXGeneral fonts (see Section 4.8 [Math and Special Symbols], page 17) to be installed on the system where the rtf file is to be displayed or printed.

Support for unicode encoded input is activated by the LATEX command
`\usepackage[utf8]{inputenc}`
or
`\usepackage[utf8x]{inputenc}`.

4.3 Input Encoding

It is not necesary to specify the '`-C`' option if you use `\usepackage{isolatin1}` or `\documentstyle[isolatin1]{...}`. LATEX2RTF automagically detects these packages/style options and switches to processing of ISO-Latin1 codes. The following encodings are supported: ansinew, applemac, cp437, cp437de, cp850, cp852, cp865, decmulti, cp1250, cp1252, latin1, latin2, latin3, latin4, latin5, latin9, next, koi8-r, koi8-u, cp1251, cp855, cp866, maccyr, macukr, utf8, and utf8x. The encoding used in RTF files is cp1252. If cyrillic fonts are present, then these are represented in the RTF file using cp1251 (Windows Cyrillic).

4.4 Language Support

The following languages from the Babel package are supported: afrikaans, german, nynorsk, spanish, bahasa, dutch, icelandic, polish, swedish, basque, english, portuges, turkish, brazil, esperanto, irish, romanian, usorbian, breton, estonian, italian, samin, welsh, catalan, finnish, latin, scottish, croatian, lsorbian, serbian, czech, french, magyar, slovak, danish, galician, norsk, slovene.

The only thing that these files do is to translate various words usually emitted by LATEX during processing. For example, this ensures that the LATEX2RTF will provide the correct translation of the word "Chapter" in the converted document.

You can select any of the above languages using the '`-l`' option. This is not needed if your LATEX file contains `\usepackage[language]{babel}`.

Encountering the '`german`' package or documentstyle option (by H. Partl of the Vienna University) makes LATEX2RTF behave like that: German Quotes, German Umlauts by

`"a`, etc. . . This support is programmed directly into L^AT_EX2RTF and supporting similar features for other languages will require patching the source code.

There is similar support for '`french`' packages.

There is reasonable support for english, latin1, latin2, and cyrillic languages.

See , for details on how to write a '`language.cfg`' file for your language by yourself.

4.5 Cross References

Cross references include everything that you might expect and then some: bibliographic citations, equation references, table references, figure references, and section references. Section, equation, table and figure references are implemented by placing RTF bookmarks around the equation number (or table number or figure number).

Page references work but are implemented as "warm" cross-references. This means that Word does not automatically update the page references when the file is opened. To update the page references you must select the entire document (in Word) and press `F9`.

Bibliographic references currently require that a valid '`.aux`' file be present. This is where L^AT_EX2RTF obtains the reference numbers. It would be nice if L^AT_EX2RTF just automatically numbered the references when there was no '`.aux`' file, but L^AT_EX2RTF does not do this yet.

L^AT_EX2RTF relies on B_IBT_EX to convert and format bibliographic entries. Usually the style file for a particular B_IBT_EX format does not use any special L^AT_EX commands and therefore the bibliography file '`file.bbl`' can be processed by L^AT_EX2RTF without difficulty. As a consequence, L^AT_EX2RTF can handle most bibliography styles without problem.

There are several latex style packages that add additional latex commands to enhance bibliographic formatting. L^AT_EX2RTF currently supports the following bibliographic packages:
apacite, apalike, authordate, harvard, natbib (also with apanat1b). These packages have many, many options and you may encounter problems with formatting in special cases.

As of L^AT_EX2RTF 1.9.17, the natbib command bibpunct is supported.

Footnotes are implemented and appear at the bottom of each page.

Indexing is reasonably-well supported. The simple mark-up of `makeindex`

        `\index{topic!subtopic@\textit{subtopic}}`

is supported. The rest of the fancy indexing stuff is not implemented. The index is created at the location of the `\printindex` command. When a file with an index is first opened in Word, you must select the entire file and update the page references and fields by pressing `F9`.

Currently, there is no support for `\labels` of `\items` in enumerate environments.

The conversion of cross-references is not perfect because of the different mechanisms in the L^AT_EX and Word worlds. In particular, if there are multiple `\label` in a figure, table, or section environment then only the first gets processed. It is also possible to confuse the L^AT_EX2RTF in eqnarray environments.

4.6 Page Formatting

LaTeX2RTF will handle some basic page formatting options, including \doublespacing (as implemented in the setspace package), and the margin setting options provided by the geometry package including commands in the ratio, centering and margin families. Not all geometry options are implemented yet, in part because there are no corresponding rtf commands for many of them.

4.7 Equations

There are five separate levels of equation translation based on the -M switch, see Section 3.2 [LaTeX2RTF Options], page 9. Each equation is converted either to an EQ field or to a bitmap or inserted as raw TeX code in the document.

This is an interim solution (for some definition of "interim"). Ideally the equations would become OLE equation objects in the RTF file, but this needs to be implemented.

Some functions in the EQ fields have two or more parameters with a separator between each two. Unfortunately, the interpretation of these separators depends on the country specific settings in the MS Windows system in which the rtf file is opened. e.g. in English versions of MS Windows, the default parameter separator is the comma, in German versions the default is the semicolon. If the parameter in the RTF file does not match the Windows setting, some EQ fields are not interpreted correctly. You can check and set the separator in [Windows control panel - country settings - numbers - list separator]. By default, LaTeX2RTF uses the comma as separator. If LaTeX2RTF is called with the command line parameter -S , the semicolon is inserted as parameter delimiter.

Theoretically, according to the Word help file, parentheses '(' or ')' in mathematical formulas should be escaped (by a preceding backslash). Despite this, adding escapes usually produces a worse result than doing nothing. If Word displays some formulas with parentheses as "Error!", you might try the -p option as a last resort.

It is also possible to convert an EQ field generated by LaTeX2RTF to an Equation Editor object by opening the rtf file in Word and double-clicking on the equation. However there are bugs in the interface between Word and Equation Editor which prevent symbols in font Symbol or MTExtra to be converted correctly. The full commercial version of the Equation Editor, called MathType, handles this conversion correctly.

If you have MathType version 6, an even better way to convert LaTeX equations to MathType is letting LaTeX2RTF write the LaTeX code of the equations verbatim in the rtf file (option -M32), then open the rtf file in Word, select the LaTeX code of an equation, cut it to the clipboard, open MathType, and paste the code. MathType will convert the code into an equation. Wilfried tried to automate this in a Word macro, but this fails because the macro does not wait until MathType is started and ready to receive the pasted code. Maybe the MathType authors will give us a hint or provide such a macro.

MathType can be downloaded from `http://www.dessci.com/` (30 day test version).

4.8 Math and Special Symbols

The way that symbols are converted in the RTF is based on the following observations. If the symbol is found in the latin 1 character set, then the current font is used, else the unicode code is inserted in the rtf code. (Implemented since version 2.1.0)

The means that on the system where the '.rtf' file is opened, a unicode font should be available or these glyphs will not be displayed correctly. As only the STIX fonts contain all needed characters, these fonts should be installed on the system where the rtf file is to be displayed or printed.

Many mathematical and special symbols are directly supported by LATEX2RTF . Less common symbols (not found in the standard font) are supported by the conversion table in the file 'direct.cfg', see Section 5.4 [Direct Conversion], page 22.

Required fonts are:

- "Times" / "Times New Roman" or "Helvetica" / "Arial", preferably with Unicode extension (i.e. supporting all European languages including Cyrillic, Greek, and Hebrew). "Times" or "Times New Roman" and "Helvetica" or "Arial" are standard on all systems, but not their Unicode extension.

- "STIXGeneral" (4 fonts in plain, italic, bold, bold-italic). These fonts are available from http://sourceforge.net/projects/stixfonts/.

  Note that while Office 2003 on Vista works correctly with the Open Type version, it does not on Windows XP (Word 2003 assigns no character spacing, and Publisher doesn't display the character at all). On Windows XP, Office 2003 only displays the symbols correctly with the TrueType (ttf) version of the fonts. But stixfonts.org only supplies the Open Type (otf) version. TrueType versions of the fonts can be downloaded from http://sites.google.com/site/olegueret/stixfonts-ttf.

4.9 Tables

Conversion of tabular and tabbing environments is somewhat lame. The main difficulty is that LATEX (and html) will size the columns of a table automatically. There is no such feature in RTF. Consequently, the conversion defaults to making all the columns have equal size. This is suboptimal and should be revised.

Another way is to use the option -t2 to make latex render them as bitmaps and insert the bitmaps into the RTF file. This feature was added in version 1.9.19.

4.10 Graphics

There is now rudimentary support for \includegraphics. Three file types will be inserted into the RTF file without needing conversion: '.pict', '.jpeg', and '.png' files. EPS and PDF files are converted to PNG using convert from the ImageMagick package. Some options are even handled properly.

4.11 Pagestyles

If there is no \pagestyle command, the RTF output is generated as with plain pagestyle, i.e. each page has its page number centered at the bottom.

You must turn this off with the \pagestyle{empty} command in the LATEX file if you don't want pagenumbers. The headings and myheadings styles are silently ignored by now. The twosided option to the \documentstyle or \documentclass produces the corresponding RTF tokens. Note that these features require RTF Version 1.4.

4.12 Hyperlatex

Hyperlatex support is largely broken at the moment, but continues to improve.

Otfried Schwarzkopf has created the "Hyperlatex Markup Language" which is a "little package that allows you to use LaTeX to prepare documents in HTML." It brings an Emacs lisp program with it to convert the Hyperlatex file to HTML. Hyperlatex can be obtained from the CTAN-sites, see Section 2.2 [Obtaining LaTeX2RTF], page 3. There are two convenient commands that avoid typing: \link and \xlink that generate an "internal" label which then is used in the following \Ref and \Pageref commands.

LaTeX makes it possible to write '\link{anchor}[ltx]{label}', which typesets: 'anchor ltx'. LaTeX2RTF does NOT support this aproach since the optional parameter is thrown away right now, see Chapter 8 [LaTeX2RTF under Development], page 29.

Note that you have to update your '`.cfg`' files if you are upgrading, since there are a lot of HTML oriented commands in Hyperlatex that we simply can 'ignore'.

4.13 APA Support

Some APA citation styles are supported, see Section 8.6.5 [Citation Commands], page 50

Support for APA text formatting is only rudimentary at the moment (headings without numbering). If you want to format a document according to APA, rename cfg/style.cfg to style_sav.cfg and rename cfg/styleAPA.cfg to style.cfg before starting LaTeX2RTF .

5 Configuration

5.1 Input processing

On processing input LaTeX2RTF first converts the LaTeX special characters. If it encounters one of the standard commands it is converted internally. If a command is not known to LaTeX2RTF it is first looked up in 'direct.cfg' and the RTF code specified there is output. If not found there it is looked up in the section 'ignore.cfg'. This file includes a lot of LaTeX commands that do not affect the output (cross reference information and the like), or that we are not able or willing to convert to RTF.

You can use 'ignore.cfg' if you get tired of seeing

```
WARNING: command: 'foo' not found - ignored
```

and you don't need 'foo' in your RTF document. It would be nice to send your additions to the LaTeX2RTF mailing list for inclusion in later distributions.

LaTeX2RTF accepts Unix, MS-DOS, and Macintosh line ending codes (\n, \r\n and \r). The files it creates get the line ending for the platform on which LaTeX2RTF was compiled.

The LaTeX file may have been created with a wide variety of character sets. If the LaTeX lacks the `\package[codepage]{inputenc}` definition, then you may need to use the command line switch to manually select the proper code page (see).

5.2 Conditional Parsing

Starting with LaTeX2RTF 1.9.18, there is a handy method for controlling which content should be processed by LaTeX or by LaTeX2RTF . Control is achieved using the standard `\if` facility of TeX. If you include the following line in the preamble of your document (i.e., before `\begin{document}`)

```
\newif\iflatextortf
```

Then you will create a new `\iflatextortf` command in LaTeX . TeX sets the value of this to `false` by default. Now, LaTeX2RTF internally sets `\iflatextortf` to be true, and to ensure that this is always the case, LaTeX2RTF ignores the command `\latextortffalse`. This means that you can control how different applications process your document by

```
\iflatextortf
This code is processed only by latex2rtf
\else
This code is processed only by latex
\fi
```

Note that `\iflatextortf` will only work within a section; you cannot use this command to conditionally parse code that crosses section boundaries. Also, it will only work on complete table or figure environments. Due to the mechanism used by LaTeX2RTF in processing these environments, at this time the only way to conditionally parse tables and figures is to include two complete versions of the environment in question, nested within an appropriate `\iflatex2rtf` structure.

LATEX2RTF versions 1.9.15 to 1.9.18 had the ability to hide contents from LATEX but expose them to LATEX2RTF by starting a line with `%latex2rtf:`. This code was horribly broken, and it was removed. The same functionality is readily achieved using the `\iflatextortf` mechanism. For example, the old method allowed

```
%latex2rtf: This line will only appear in the latex2rtf output,
```

To get the same behavior, define `\iflatextortf` and use

```
\iflatextortf
This code is processed only by latex2rtf
\fi
```

5.3 Output Formatting

On writing output, LATEX2RTF generates the operating system specific line ending code (`\n` on Unix, `\r\n` on DOS or Windows), depending on which system LATEX2RTF was compiled. As both should be legal to any RTF Reader the resulting RTF rendering should not be affected.

LATEX2RTF does not offer a whole lot of flexibility in how files are translated, but it does offer some. This flexibility resides in four files '`direct.cfg`', '`ignore.cfg`', '`fonts.cfg`', and '`language.cfg`'. These filese are documented in the next four sections.

5.4 Direct Conversion

The file '`direct.cfg`' is used for converting LATEX commands by simple text replacement. The format consists of lines with a LATEX command with backslash followed by comma. The rest of the line until a '.' character will be written to the RTF file when the command is found in the LATEX file. Lines starting with a '#' character are ignored. After the '.' everything is ignored to end of line. To select a specific font use `*fontname*`, where `fontname` be defined in '`fonts.cfg`'. To write the '`*`' character use '`**`'.

```
\bigstar,{\u8727**}.
\copyright,\'a9.
```

In general, specific fonts should not be specified in this file. There is a mechanism to do this, but it turns out that this is not as useful as originally thought. The main reason that this fails is because the conversion of equations from Word fields to Equation Editor objects is buggy. The consequence is that to have symbols show up properly, they must be encoded differently when the Symbol and MT Extra fonts are used — depending on whether Word fields are active or not. It was all very tedious to figure out a mechanism that was "least broken."

5.5 Ignore Command

The file '`ignore.cfg`' is used for defining how to ignore specific commands. This file is used for recognition of LATEX variables, user defined variables, and some simple commands. All variables are ignored but the converter must know the names to correctly ignore assignments to variables. Lines in this file consist of a variable name with backslash, followed by comma and the type of the variable followed by '.'. Possible types are

'`NUMBER`'   simple numeric value

'`MEASURE`'   numeric value with following unit of measure

'`OTHER`'   ignores anything to the first character after '`=`' and from there to next space. e.g., `\setbox\bak=\hbox`

'`COMMAND`'   ignores anything to next '`\`' and from there to the occurence of anything but a letter e.g., `\newbox\bak`

'`SINGLE`'   ignores single command e.g., `\noindent`

'`PARAMETER`'
    ignores a command with one parameter e.g., `\foo{bar}`

'`PACKAGE`'   does not produce a Warning message if PACKAGE is encountered, e.g., '`\kleenex,PACKAGE.`' ignores '`\usepackage{kleenex}`'

'`ENVCMD`'   intended to process contents of unknown environment as if it were plain LaTeX , e.g. '`\environ,ENVCMD.`'
Therefore '`\begin{environ} text \end{environ}`' would be converted to 'text'. Doesn't work in LaTeX2RTF version 2.1.0.

'`ENVIRONMENT`'
    ignores contents of that environment, e.g., with '`\ifhtml,ENVIRONMENT.`", '`\begin{ifhtml} text \end{ifhtml}`' ignores 'text'.

The types are in upper case exactly as above. Do not use spaces. Lines starting with a '`#`' character are ignored. After the '.' everything is ignored to end of line. Example:

    `\pagelength,MEASURE.`

5.6 Font Configuration

The file '`fonts.cfg`' contains the font name mapping. For example, this file determines what font is used to represent `\rm` characters in the RTF file.

A line consists of a font name in LaTeX followed by comma and a font name in RTF. The end is marked by a '.'. No spaces are allowed. The LaTeX font will be converted to the RTF font when it is found in the LaTeX file. If multiple translations for the same LaTeX font are specified, only the first is used. All fonts in a LaTeX file that are not in this file will be mapped to the default font. All RTF fonts listed in this file will be in every RTF file header whether used or not. Lines starting with a '`#`' character are ignored. After the '.' everything is ignored to end of line.

To add a RTF font not used as substitute for a LaTeX font — for example a Symbol font used in '`direct.cfg`' — use a dummy LaTeX name like in the following

    `Dummy3,MathematicalSymbols.`

Make sure you use the correct font name. Take care of spaces in font names. The default fonts are named Roman `\rm`, Slanted `\sl`, Sans Serif `\sf`, Typewriter `\tt`, or Calligraphic `\cal`.

5.7 Language Configuration

The file(s) 'language.cfg' control the translation of LaTeX 's "hardcoded" sectioning names. The standard LaTeX styles have some fixed Title names like 'Part', 'Reference' or 'Bibliography' that appeared in English or German in the output with the original versions of LaTeX2RTF .

It is unlikely that you will need to create a new 'language.cfg' file. However, just look at one of the existing files and follow the pattern. The format is really simple.

6 Error Messages and Logging

As stated in the Debugging section, LaTeX2RTF provides a means to control the amount of debugging information through the '-d#' switch. By using a debugging level of 4, you can get a pretty good idea of what LaTeX command caused the problem and what line that command might be found on. Warnings and error messages are output to stderr and by default listed in the console window. They can be redirected to a file "latex2rtf.log" by appending `2>latex2rtf.log` to the command line.

'`Fatal error messages`'

indicate a bug in the source code. PLEASE report them, if they do not apear in the documentation (see Section 8.4 [Reporting Bugs], page 29).

'`Error messages`'

always abort the program and are caused by conditions that prevent further conversion of the input file. Typically this is cause by LaTeX2RTF getting hopelessly confused by the number of braces in the LaTeX file.

'`Warning messages`'

inform you, that there is some conversion loss from LaTeX to RTF, or that the output file has some restrictions on some RTF Readers. Most of these warnings can be supressed by add the offending command to the '`ignore.cfg`' file.

Error and Warning messages should follow the GNU Coding standards, i.e. they have the format

```
inputfile':line: Error|Warning: message
```

You can also control the level of debugging output by inserting `\verbositylevel{#}` in the LaTeX file. This is very handy if you have a large LaTeX file that is failing in only a small section. For example,

```
problem free latex file ....
\verbositylevel{5}
problematic code
\verbositylevel{0}
```

will cause a huge amount of debugging information to be emitted for the problematic code.

Error reporting and logging still has many inconsistencies, but it gets better with each release. Don't try to make any sense in debugging levels above 4, these are for my own delight only and can change significantly between versions.

The '`inputfile`' may be incorrectly identified if it is incorporated through `\input` or `\include`. The line may be also be wrong at times. See Section 8.3 [Known Bugs], page 29.

7 History & Copyright

In 1994 the first Version of LaTeX2RTF was written by Fernando Dorner and Andreas Granzer of the Viena University supervised by Ralf Schlatterbeck in a one-semester course. They created a simple LaTeX parser and added most of the infrastructure for the program. This was version 1.0 of LaTeX2RTF . In 1995, work on LaTeX2RTF was continued in another one-semester course by Friedrich Polzer and Gerhard Trisko. The result was LaTeX2RTF version 1.5. Ralf Schlatterbeck (ralf "at" zoo.priv.at) maintained and extended LaTeX2RTF until 1998.

In 1998 Georg Lehner (jorge_lehner "at" gmx.net) found the reference to LaTeX2RTF on the TeX Conversion Webpage of Wilfried Hennings and added some functionality and took over the maintainence of the program. The last version release by Georg is 1.8aa. The bulk of development post 1.8aa was done by Scott Prahl. Wilfried Hennings now coordinates the development of the program and maintains the project on SourceForge where there are also (low volume) mailing lists for users and developers. Mailing via one of these lists requires subscription to the list (to prevent spam). For subscription to these lists visit the page: users list or developers list

As of March 2010, version 2.1.1 of LaTeX2RTF is available.

The contents of this manual were composed by copying shamelessly what was available in the original sources and documentation.

8   LaTeX2RTF under Development

8.1   Unimplemented Features

- LATEX2RTF ignores some optional parameters of `\documentstyle`
- Add the code to produce the corresponding chapter, section, and page numbering with headings and myheadings pagestyles. Implement `\markboth` and `\markright`.
- To support `\tableofcontents` there would be two approaches: Transfer sectioning information, title text and then produce page numbers by the rtf- reader. Scan and label all of the sectioning commands while reading and then construct the sectioning information using these labels. Needs two passes on LATEX input.

8.2   Missing options

Missing or buggy command line options.

'`-d`'   Information logging and Error reporting is not implemented consistently. Need to test and track problems with the linenumber and with the file name.

'`--long_names`'
            It would be useful to implement the GNU long option names, e.g.: '–debug', '–output_file', '–quiet', etc. This could be done by switching to the GNU getopt package.

8.3   Known Bugs

1. The first parameter of a \link{anchor}[ltx]{label} is converted to the rtf-output. Label is stored to hyperref for later use, the optional parameter is ignored. [ltx] should be processed as Otfried recommends it, to use for exclusive LATEX output.e.g: \link{readhere}[~\Ref]{explaining: chapter}. Since {explaining:chapter} is yet read by LATEX and hyperlatex when [...] is evaluated it produces the correct reference. LATEX2RTF is only strolling from left to right through the text and can't remember what she will see in the future.

2. The diagnostics routine does not output the correct (actual) input filename. ('.aux', '.bbl', `\input`).

8.4   Reporting Bugs

Report bugs to to the bug tracking system at SourceForge. Only report bugs for the latest version of LATEX2RTF that is available. Please provide the following information and observe the following guidelines when reporting a bug in the program:

1. State the version of LATEX2RTF that you are using. You can get the version by specifying the '`-V`' option to LATEX2RTF .

2. Specify the your operating system and version. Be sure to check the file 'Makefile' for settings that may be specific to your machine, especially for some versions of SunOS there may be settings which are needed to compile successfully. Do this before submitting a bug report.

3. If the program produces wrong output or does not work for you, include a short LaTeX file along with a description of the problem. Isolating the bug into a small LaTeX file does two things. First, it provides a file that can be used to test future versions of LaTeX2RTF and second, it certainly improves the chances that the bug will get some attention. Do not send me large LaTeX or RTF files, I simply do not have the time to wade through large files to search for a bug!

4. Be patient. I am maintaining the program in my free time. I did not write most of the code. Often I do not have the time to answer to your question. I will, however, try to fix reported bugs in upcoming releases.

8.5 Todo List

Scott's ToDo list

- Use lex/yacc to implement getSection
- Add support for pagestyle
- Better support for ignoring commands

Georg's todo list

- Make this Manual more consistent, the ToDo and Known Bug List shorter and the Features List longer.
- Harmonize all of the error and warning messages.
- Put warnings everywhere applicable about producing RTF 1.4 tokens.
- Provide an Error and Warning recovery guide to the user.
- Add a chapter with lists of all LaTeX commands that convert, and that do not convert to RTF, including their status (for future releases, never, partially functional, ...).

8.6 Command List

Listed here are all the LaTeX commands currently parsed by LaTeX2RTF . Note: inclusion in this list does not mean that a command is fully and correctly handled by LaTeX2RTF . In some cases the commands here are place-holders only, and are not implemented at all. The list is provided to encourage developers to note any departures from the behaviour that LaTeX users will expect. The location of the commands is noted to assist anyone interested in hacking on the C source code. This list is a work in progress, and may not be immediately useful to general users, other than to indicate those commands that we have at least contemplated implementing.

8.6.1 General Commands

These commands are found in the `commands[]` array in commands.c. They are arranged alphabetically within sections according to function.

8.6.1.1 Basic Commands

All listed commands work as expected.

begin

centerline

end

endnote

footnote

raggedright
the

today

vcenter

8.6.1.2 Font Commands

All listed commands work as expected.

bf

bfseries

cal

em

emph

enotesize

footnotesize
HUGE

Huge

huge

it

itshape

LARGE

Large

large

mathbf

mathcal

mathit

mathmd

mathnormal
mathrm

mathsc

mathsf

mathsl

mathtt

mathup

mdseries

mit

normalfont
normalsize

rm

rmfamily

sc

scfamily

scriptsize

scshape

sf

sffamily

sl

slshape

small

ssmall

textbf

textfont

textit

textmd

textnormal
textrm

textsc

textsf

textsl

texttt

textup

tiny

tt

ttfamily

underbar

underline

upshape

8.6.1.3 Logos

All listed commands work as expected.

AmSLaTeX
AmSTeX

BibTeX

kern

LaTeX

latex

LaTeXe

lower

LyX

SLiTeX

TeX

8.6.1.4 Special Characters

These commands all work as expected.

\

acute

b

bar

breve

c

check

d

ddot

dot

grave

H

hat

i

j

l

L

r

tilde

u

v

vec

8.6.1.5 Sectioning Commands

chapter

chapter*

paragraph

paragraph*
part

part*

section

section*

subparagraph
subparagraph*
subsection

subsection*
subsubsection
subsubsection*

8.6.1.6 Uncategorized

These commands need to be organized into new or existing sections.

abstract

addcontents
              Ignored

addcontentsline
              Ignored

addvspace   Ignored

aleph

Alph

alph   Ignored

alpha

Alpha   Ignored

amalg

and

angle

appendix   Ignored

approx

arabic   Ignored

ast

author

baselineskip
because

beta

Beta

bibentry

bibitem

bibliography
bibliographystyle
bibliographystyle
             Ignored

bigskip

bot

BoxedEPSF
bullet

cap

caption

cdot

cdots

centering

char

chi

Chi

circ

cite

citeonline

cleardoublepage
clearpage

clubsuit

cong

contentsline

coprod

cup

date

ddots

delta

Delta

dfrac

Diamond

diamondsuit
div

doteq

dotfill   There is no rtf code for dotfill; LaTeX2RTF inserts an ellipsis only.

dots

dots

downarrow
Downarrow
efloatseparator
ell

emptyset

endinput

endnotemark
                 Ignored

ensuremath
epsfbox

epsffile

epsilon

eqref

equiv

eta

exists

fbox

fbox

fnsymbol   Ignored

footnotemark
                 Ignored

forall

frac

Frac

framebox   Ignored

frenchspacing

            Ignored

gamma

Gamma

ge

geq

gg

glossary   Ignored

glossaryentry

            Ignored

hbar

hbox

heartsuit

hsize

hslash

hspace   Ignored

hspace*   Ignored

htmladdnormallink
htmlref

iiint

iint

Im

in

include

includegraphics
includegraphics*
includeonly

            Ignored

indent

index

indexentry
            Ignored

infty

input

int

int

iota

kappa

label

lambda

Lambda

land

langle

lceil

ldots

le

left

leftarrow

Leftarrow

leftharpoondown
leftleftarrows
leftrightarrow
Leftrightarrow
leftrightarrows
leq

let   Ignored

letterspace
lfloor

lim

liminf

limsup

linebreak   Ignored

lineskip

listoffigures
listoftables
ll

longleftarrow
longleftrightarrows
longrightarrow
lor

makebox   Ignored

maketitle

mapsto

marginpar   Ignored

markboth   Ignored

markright   Ignored

matrix

mbox

measuredangle
medskip

mho

moveleft

moveright

mp

mu

multicolumn
nabla

ne

nearrow

neg

neq

newblock

newcount   Ignored

newfont   Ignored

newpage

newsavebox
             Ignored

nobibliography
             Ignored

nobreakspace
nocite

noindent

nolinebreak
                Ignored

nonfrenchspacing
                Ignored

nonumber

nopagebreak
                Ignored

notag

nu

numberline
nwarrow

omega

Omega

omicron

onecolumn
onlinecite

oplus

oslash

otimes

output   Ignored

overline

pagebreak

pagenumbering
                Ignored

pageref

pagestyle   Ignored

par

parbox

partial

perp

phi

Phi

pi

Pi

pm

prec

printindex

prod

prod

propto

protect   Ignored

psfig

psfrag   Ignored

psi

Psi

qquad

quad

raisebox   Ignored

rangle

rceil

Re

ref

refstepcounter
rfloor

rho

right

Rightarrow
rightarrow

rightharpoonup
rightleftarrows
rightleftharpoons
rightrightarrows
Roman   Ignored

roman   Ignored

rule

samepage   Ignored

savebox   Ignored

sbox   Ignored

searrow

setbox

settowidth   Ignored

sigma

Sigma

sim

simeq

smallskip

spadesuit

sqrt

stackrel

stepcounter

            Ignored

stretch   Ignored

subset

subseteq

succ

sum

sum

supset

supseteq

surd

swarrow

tableofcontents
tau

textalpha

textbeta

textbullet

textchi

textcolor

textDelta

textdelta

textellipsis
textepsilon
texteta

textGamma
textgamma
textiota

textkappa

textLambda
textlambda
textmu

textnu

textOmega
textomega

textperiodcentered
textPhi

textphi

textPi

textpi

textPsi

textpsi

textSigma

textsigma

textsubscript
textsuperscript
textTau

texttau

textTheta

texttheta

textXi

textxi

textzeta

thanks

therefore

Theta

theta

times

title

to

triangleleft	
triangleright	
twocolumn	
typeaout	Ignored
Typein	Ignored
typein	Ignored
typeout	Ignored
Uparrow	
uparrow	
updownarrow	
Updownarrow	
upsilon	
Upsilon	
url	
usebox	Ignored
value	
varepsilon	
varnothing	
varphi	
varpi	
varpropto	
varsigma	
vartheta	
vbox	
vdots	
vee	
verb	
verb*	
vref	
vsize	
vskip	
vspace	
vspace*	
wedge	
wp	

xi

Xi

zeta

8.6.2 Preamble Commands

These commands are found in `PreambleCommands[]` in commands.c, and are implemented in preamble.c.

addtocounter
addtolength
baselineskip
celsius

cfoot

chead

cline

DeclareRobustCommand
DeclareRobustCommand*
def

degreecelsius
documentclass
documentstyle
doublespacing
        Currently, the only command from the setspace package that is implemented, and the only way to modify line spacing.

endnotetext
EUR

euro

evensidemargin
fancyfoot

fancyhead

flushbottom
footnotetext
geometry   Currently recognizes *ratio, *centering, *margin, left, right, inner, outer, top, bottom, right, left (including vmargin, hratio etc.)

headheight
headsep

hline

hoffset

htmladdnormallink
htmlref

hyphenation
iflatextortf
ifx

include

input

latextortffalse
              Ignored

latextortftrue
              Ignored

lfoot

lhead

listoffiles   Ignored

makeglossary
              Ignored

makeindex
              Ignored

makelabels
              Ignored

markboth   Ignored

markright   Ignored

newcommand
newcounter
newenvironment
newif

newlength

newtheorem
nobreakspace
nofiles   Ignored

oddsidemargin
pagenumbering
              Ignored

pagestyle

parindent

parskip

providecommand
raggedbottom
renewcommand
renewenvironment
renewtheorem
              Ignored

resizebox

resizebox*

rfoot

rhead

setcounter

setlength

signature

textheight

textwidth

theendnotes
thepage

thispagestyle

> Ignored

topmargin

usepackage
verbositylevel
voffset

8.6.3 Letter Commands

Found in `LetterCommands[]` in commands.c.

address

cc

closing

encl

opening

ps

signature

8.6.4 Language Commands

8.6.4.1 German Commands

Found in `GermanModeCommands[]` in commands.c.

ck

glqq

glq

grq

grqq

8.6.4.2 Czech Commands

uv

8.6.4.3 French Commands

deuxpoints
dittomark

FCS

fg

fup

ieme

iemes

ier

iere

ieres

iers

inferieura

LCS

lq

lqq

numero

Numero

numeros

Numeros

og

pointexclamation
pointinterrogation
pointvirgule
primo

quarto

rq

rqq

secundo

superieura

tertio

up

8.6.4.4 Russian Commands

CYRA

cyra

CYRB

cyrb

CYRC

cyrc

CYRCH

cyrch

CYRCHSH
cyrchsh

CYRD

cyrd

CYRE

cyre

CYREREV
cyrerev

CYRERY

cyrery

CYRF

cyrf

CYRG

cyrg

CYRH

cyrh

CYRHRDSN
cyrhrdsn

CYRI

cyri

CYRISHRT
cyrishrt

CYRK

cyrk

CYRL

cyrl

CYRM

cyrm

CYRN

cyrn

CYRO

cyro

CYRP

cyrp

CYRR

cyrr

CYRS

cyrs

CYRSFTSN

cyrsftsn

CYRSH

cyrsh

CYRT

cyrt

CYRU

cyru

CYRV

cyrv

CYRYA

cyrya

CYRYU

cyryu

CYRZ

cyrz

CYRZH

cyrzh

8.6.5 Citation Commands

8.6.5.1 Apacite Commands

AX

BAnd

BBA

BBAA

BBAB

BBAY

BBC

BBCP

BBCQ

BBN

BBOP

BBOQ

BCAY

BCBL

BCBT

BCHAIR

BCHAIRS

BCnt

BCntIP

BED

BEd

BEDS

Bem

BIP

BMTh

BNUM

BNUMS

BOthers

BOWP

BPG

BPGS

BPhD

BREPR

BTR

BTRANS

BTRANSS
BUMTh

BUPhD

BVOL

BVOLS

citeA

citeauthor

citeNP

citeyear

citeyearNP
fullcite

fullciteA

fullciteauthor
fullciteNP

shortcite

shortciteA

shortciteauthor
shortciteNP

8.6.5.2 AuthorDate Commands

citename

shortcite

8.6.5.3 Harvard Commands

cite

citeaffixed

citeasnoun

citename

citeyear

citeyear*

harvardand
harvarditem
harvardyearleft
harvardyearright
possessivecite

8.6.5.4 HyperLatex Commands

Cite

link

Pageref

Ref

S

xlink

8.6.5.5 Apacite Commands

bibpunct

cite

citealp

Citealp

citealp*

citealt

Citealt

citealt*

citeauthor

Citeauthor
citeauthor*
citep

Citep

citep*

citet

Citet

citet*

citetext

citeyear

citeyearpar

8.6.6 Acronym Commands

usepackage [options] {acronym}
ac

acfi

acro

acrodef

acrodefplural
acused

8.6.7 Other Commands

Other Commands:
item
caption
center

8.6.8 Environments

Environments processed - found in `params[]` in commands.c.

abstract

acknowledgments
align

align*

alltt

array

bf

bfseries

center

comment

compactenum
compactitem
description
displaymath
document

em

enumerate

eqnarray

eqnarray*

equation

equation*

figure

figure*

flushleft

flushright

htmlonly   Ignored

it

itemize

itshape

landscape

latexonly   Ignored

letter

list

longtable

longtable*

math

mdseries

minipage

multicolumn
music

picture

quotation

quote

rawhtml   Ignored

rm

rmfamily

sc

scshape

sf

sffamily

sl

sloppypar

slshape

small

tabbing

table

table*

tabular

tabular*

thebibliography
theindex   Ignored

titlepage

tt

ttfamily

verbatim

Verbatim

verse

9 Function Index

10 Concept Index

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