

L^AT_EX₂rtf

a converter
from L^AT_EX
to rtf
Edition 0.2

Georg Lehner, et.al.

History & Copyright

In 1994 the first Version of L^AT_EX₂rtf was written by a group of students of the Viena University supervised by Ralf Schlatterbeck. They took up a L^AT_EX parser and added most of the functionality to the program. In 1995 work continued with a second group of students. The result was L^AT_EX₂rtf Version 1.5.

In 1998 Georg Lehner <glehner@unanleon.edu.ni> found the reference to L^AT_EX₂rtf on the Textconversion webpage ‘<http://www.kfa-juelich.de/isr/1/texconv.htm>’ of Wilfried Hennings <W.Hennings@fz-juelich.de>, added some functionality and took over the maintenance of the program. Wilfried Hennings actually coordinates the development of the program and maintains a mailing list <latex2rtf@fz-juelich.de>.

In July prerelease 1.7 was made available to the beta-tester group. Version 1.8 is to be released soon, with a couple of bug-fixes and some enhancements for several document-classes/styles.

Afterwards there shall be a jump to Version 2.0 with a complete redesign, but this is not history but future ...

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Note that this Copyright note only applies to the changes made to get the actual version. The older versions have their own Copyright policy stated in their distribution.

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

1 Introduction

$\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}_2\text{rtf}$ is a translator program from $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ text into the RTF format which is native to Microsoft Word and Word for Windows. RTF can be exported and/or imported by several textprocessors.

The text and much of the formatting information is translated to RTF, making the new file look very similar to the original.

Now, for what do we need such a thing? There are three purposes:

- 1.) You use $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ and hate everything beginning with MS-... But you have to send your documents to people which don't even now that there exist other things than MS-...
- 2.) You know somebody who sends you frequently very fine $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ -documents. But you are "on the other side" and need to import her files, steal some part of them and Desktop-publish it with your fine MS-... environment.
- 3.) You maybe have both things, $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ and MS-..., or you don't. But you like the way how $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ and friends work, and you don't want to type in a letter to your friends with about 345 characters and end up with a '.doc' file of 32,845 Byte. So you edit your documents either with *edit.com* or *edlin* in the structured form that $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ encourages, and then you use MS-..., or MS-...-Viewer or any other rtf-rendering Software to print out your file.

Nevertheless there are drawbacks in the conversion. In fact, don't expect any $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ -file to be converted like you want, don't expect it to be converted without errors or warnings, and: don't even expect it to be converted at all, since $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}_2\text{rtf}$ is at most at a very experimental stage. $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}_2\text{rtf}$ is known to have a lot of bugs. And they grow more and more each day. In fact we could state that there are some special cases, where a $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ -file can be translated to RTF satisfactorily by $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}_2\text{rtf}$.

– This was sort of disclaimer, ok? Ok!

$\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ 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 possible different commands and styles in $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}$ are much more delimited and better standardized than in RTF, only a small subset of them is (yet) implemented. Look at See [\[Unimplemented Features\]](#), page [\[Unimplemented Features\]](#) for more details.

Some of the capabilities are restricted or buggy, see also See [\[Known Bugs\]](#), page [\[Known Bugs\]](#).

RTF is a moving target, i.e. Microsoft(tm) does not stop to invent new extensions and features for it. So you cannot view newer RTF files with older Word Processors. $\text{L}^{\text{A}}\text{T}_{\text{E}}\text{X}_2\text{rtf}$ eventually will generate RTF-output that is unreadable with your Programm.

Also the syntax and semantics are somewhat deliberate, i.e. you can generate a syntactically correct RTF file that cannot be displayed by some Word Processors.

For more details on RTF look at the RTF-Tools by Paul DuBois, and the corresponding newsgroups, etc. '<http://www.primite.wisc.edu/>'

2 Availability

L^AT_EX₂rtf is available for a lot of Unix Platforms, for Windows 95, Windows NT and for MS-DOS.

The last official version 1.5 as maintained by Ralf Schlatterbeck <ralf@zoo.priv.at> has been available via ftp from the Viena University but I don't have the reference at hand by now, and from the CTAN sites: e.g. '<http://www.dante.de>' or '<http://www.ctan.org>'.

There is an MSDOS version available on '<ftp://ftp.cs.indiana.edu/pub/vmenkov/latex2rtf>'. The port was made by Vladimir Menkov <vmenkov@cs.indiana.edu>

Starting from Release 1.8 there should be included an MSDOS executable '[12r.exe](#)', made directly from the sources.

The Windows 95 (NT) Version requires Cygnus-Cygwin32 (See '<http://www.cygnum.com/misc/gnu-win32>'.

Actually work is going on to improve L^AT_EX₂rtf and yet exist prereleases maintained by Georg Lehner <glehner@unanleon.edu.ni>¹.

There are a couple of persons working on the L^AT_EX₂rtf-revival, coordinated by Wilfried Hennings <W.Hennings@fz-juelich.de>. By now we are looking for a new home for L^AT_EX₂rtf, where you can download the sources.

Wilfried installed a Mailing-List on his Server: <latex2rtf@fz-juelich.de> so contact us for the latest news.

¹ Don't bother about Warning Messages of Undeliverable Mail. My provider (The University of León/Nicaragua) prefers to switch off their computers at night, because of line instabilities. So your Mailserver will have to retry occasionally for delivering your messages.

3 Invoking L^AT_EX₂rtf

The `latex2rtf` command converts a L^AT_EX file into RTF text format. The text and much of the formatting information is translated to RTF making the new file look very similar to the original.

The command line syntax is:

```
latex2rtf [-V] [-l] [-v #] [-o outputfile] [-a auxfile] [-b bblfile] [-i idiom]
[inputfile]
```

See [\(undefined\) \[Missing Options\]](#), page [\(undefined\)](#) for actual implementations irregularities.

The ‘`-V`’ option prints version information on standard output and exits.

The ‘`-l`’ option enables you to convert ISO 8859-1 (Latin-1) special characters in the L^AT_EX source.

The ‘`-i`’ option requires a language (*idiom*) as an option. The corresponding ‘*idiom.cfg*’ file is then used to translate the predefined section headings of L^AT_EX to *idiom*.

The ‘`-v`’ (verbosity) option determines the amount of information while processing the inputfiles. ‘0’ means only Errors, ‘1’ Warning Messages (default) also. See [\(undefined\) \[Verbosity\]](#), page [\(undefined\)](#) for more details.

Unless an *outputfile* is specified with the ‘`-o`’ option, the resulting RTF is produced on standard output.

You can specify an *auxfile* (for citations) with the ‘`-a`’ option. If this is omitted, the name of the inputfile with the suffix replaced ‘`.aux`’ will be taken.

The ‘`.aux`’-file is needed for cross-references and citations. You have to provide both, the ‘`.tex`’- and the ‘`.aux`’-file to be able to convert L^AT_EX-files with this features.

You can specify a *bblfile* (for citations) with the ‘`-b`’ option. If this is omitted, the name of the inputfile with the suffix replaced by ‘`.bbl`’ will be taken.

If *inputfile* is not specified, standard input is read.

User defined L^AT_EX commands are ignored. If you are familiar with the RTF format and the commands can be translated by simply inserting a format string into the RTF file you can add these commands to the *direct.cfg* configuration file. See [\(undefined\) \[direct.cfg\]](#), page [\(undefined\)](#) for a format description.

To correctly convert font names you must edit the *fonts.cfg* configuration file. You have to specify the font names you use and how the L^AT_EX default font names should be converted to RTF. See format description in [\(undefined\) \[fonts.cfg\]](#), page [\(undefined\)](#).

L^AT_EX 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 [\(undefined\) \[ignore.cfg\]](#), page [\(undefined\)](#) for a format description.

The language dependent sectioning names can be redefined to meet the idiom of the L^AT_EX document. See [\(undefined\) \[language.cfg\]](#), page [\(undefined\)](#) for a description.

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 MS-DOS version 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*.

CAUTION: Please make sure that the input file is a correct LaTeX file. Use LaTeX to find and correct errors before using latex2rtf. The conversion command does not properly handle all errors caused by corrupt input files.

Make sure that the configuration files are in the correct directory. L^AT_EX₂rtf will need at least ‘*fonts.cfg*’, ‘*direct.cfg*’, ‘*ignore.cfg*’, ‘*english.cfg*’.

You may have to change one or more of them to suit your needs, see (undefined) [Configuring], page (undefined) for details.

See See (undefined) [Reporting Bugs], page (undefined) on how to reach the maintainer.

3.1 Verbosity

With the ‘-v’ option you can specify how much of its internal working L^AT_EX₂rtf is reporting.

If there is a logfile specified the output goes to this file. Nonetheless Warnings and Errors are logged to stderr always.

(Actually) possible values of ‘-v’ are

- ‘0’ only errors (= ‘-q’).
- ‘1’ Translation Warnings (default).
- ‘2’ conditions on output e.g. (rtfl.5 options).
- ‘3’ complete logging of what’s going on.
- ‘4’ Weird debugging messages.

3.2 Isolatin

It is not necessary to specify the -l option if you use `\usepackage{isolatin1}` or `\documentstyle[isolatin1]{...}`. L^AT_EX₂rtf automagically detects this packages/style options and switches to processing of ISO-Latin1 codes.

3.3 Languages

Do not append the ‘.cfg’ suffix to the *idiom* parameter to -i switch. If you specify an *idiom* that does not exist in the search path for configuration files as described above the program aborts.

In the actual version there are three language files delivered: *english*, *german*, *spanish*. If you specify `\usepackage` or a `documentstyle` option with one of these *idioms* L^AT_EX₂rtf automagically loads the correct language file and you can omit the -i switch.

See See (undefined) [language.cfg], page (undefined) for details on how to write a ‘*idiom.cfg*’ file for your language by yourself.

4 Features

In this chapter you find what styles is L^AT_EX₂rtf supposed to translate correctly to RTF.

4.1 Support for the Hyperlatex Style

Otfried Schwarzkopf has created the "Hyperlatex Markup Language" which is a "little package that allows you to use L^AT_EX 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 [\[Availability\]](#), page [\(undefined\)](#).

There are two handsome commands that avoid typing: `\link` and `\xlink` that generate an "internal" label which then is used in the following `\Ref` and `\Pageref` commands.

L^AT_EX makes it possible to write '`\link{anchor}[ltx]{label}`', which typesets: '`anchor ltx`'. L^AT_EX₂rtf does NOT support this aproach since the optional parameter is thrown away by now, see [\(undefined\)](#) [Program Development Status], page [\(undefined\)](#) for details.

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`'.

4.2 LaTeX2e

L^AT_EX₂rtf understands `\documentclass{...}` and `\usepackage{...}`, but the optional parameter of the latter is thrown away. See [\(undefined\)](#) [Known Bugs], page [\(undefined\)](#).

4.3 Character encoding

If using the `-l` command line option or the `isolatin1` package or style, L^AT_EX₂rtf automatically interprets the contents of the input file as ISO_8859_1 encoded and generates the corresponding RTF tokens on output.

In some situations this conversion does not take place, or is faulty. See [\(undefined\)](#) [Known Bugs], page [\(undefined\)](#).

If you have another package that provides support for this or another codepage please notify us ([\(undefined\)](#) [Reporting Bugs], page [\(undefined\)](#)), to include support for it.

4.4 Cross References

If RTF version 1.1 is chosen (see [\(undefined\)](#) [Missing Options], page [\(undefined\)](#)) `\label`, `\ref`, and `\pageref` commands from LaTeX are translated to hidden text in the RTF file. This makes it possible to correctly edit the resulting file in the target word processor. If RTF version 1.4 (or higher) is chosen, crossreference updating is automated by the RTF reader.

4.5 Pagestyles

If there is no `\pagestyle` command, the RTF output is generated as with `plain` pagestyle, i.e. each page get's 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.

4.6 Internationalization

$\text{\LaTeX}_2\text{rtf}$ translates automatically the sectioning titles for `'Part'`, `'References'`, `'Bibliography'` and `'Abstract'` if it encounters a `'german'` or `'spanish'` package or documentstyle option.

The other fixed sectioning titles ("Table of Contents" and the like) are not yet needed, because $\text{\LaTeX}_2\text{rtf}$ does not handle these \LaTeX features.

See See \langle undefined \rangle [Missing Options], page \langle undefined \rangle for information on other languages.

Encountering the `'german'` package or documentstyle option (by H.Partl of the Viena University) makes $\text{\LaTeX}_2\text{rtf}$ behave like that: German Quotes, German Umlauts by `"a'`, etc. ...

5 Configuring L^AT_EX₂rtf

5.1 Input processing

On processing input L^AT_EX₂rtf first converts the L^AT_EXspecial characters. If it encounters one of the standard commands it is converted internally. If a command is not known to L^AT_EX₂rtf it is first looked up in the `<undefined>` [direct.cfg], page `<undefined>` and the RTF code specified there is output. If not found there it is looked up in the `<undefined>` [ignore.cfg], page `<undefined>`, since there are a lot of L^AT_EXcommands that do not show up in the .dvi 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 bored to see "WARNING: command: foo not found - ignored" and you don't need ‘foo’ in your Word(R) document, but it would be nice to send me the offending command to include it in the distributions configuration files.

L^AT_EX₂rtf accepts Unix-like, MSDOS and Macintosh line ending codes (`\n`, `\r\n` and `\r`).

Optionally the input is interpreted as iso-latin1 encoded, `<undefined>` [Character encoding], page `<undefined>`.

5.2 Output formatting

Since the RTF-Readers normally have their own mood of typesetting and font handling we have to convert the L^AT_EXfonts to RTF fontnames. This is handled by the file `<undefined>` [fonts.cfg], page `<undefined>`.

If you have information about adequate font mappings from Metafont to TrueType fonts please send me a note, so I can improve the resemblance between L^AT_EXand RTF output. I would be happy to include a font resource list in this manual.

Nevertheless you are free to make all fancy things you like, map `\rm` on WingDings if you feel somewhat strange today...

The standard L^AT_EX 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 L^AT_EX₂rtf.

Now you can determine what should appear at this places with an appropriate `<undefined>` [language.cfg], page `<undefined>` file.

Actually I grep-ed the descriptions out of the ‘babel’ files from t_EX to supply english, german and spanish translations.

On writing output, L^AT_EX₂rtf generates `\n` (lf, Newline) as line ending code. Your RTF-Reader should accept this on any platform. If you *ftp* your RTf-file from or to MSDOS platforms the line ending code can be converted to `\r\n`. As this should also be legal to any RTf-Reader the resulting RTF-rendering should not be affected.

5.3 ‘direct.cfg’

The file `direct.cfg` is used for converting L^AT_EX commands by simple text replacement. The format consists of lines with a L^AT_EX 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 recognized in the L^AT_EX file. Lines starting with a ‘#’ character are ignored. After the ‘.’ everything is ignored to end of line. To select a specific font use ‘*fontname*’. Make sure that the font name `fontname` is listed in the fonts configuration file at least as dummy. To write the ‘*’ character use ‘***’. example:

```
‘\alpha,{\f*Symbol*a}. #alpha under Windows Symbol Font’
‘\copyright,{\ansi\'a9\pc}.’
```

5.4 ‘ignore.cfg’

The file `ignore.cfg` is used for defining how to ignore certain commands. This file is used for recognition of L^AT_EX-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. eg. <code>\setbox\bak=\hbox</code>
COMMAND	ignores anything to next ‘\’ and from there to the occurrence of anything but a letter. eg. <code>\newbox\bak</code>
SINGLE	ignore single command. eg. <code>\noindent</code>
PARAMETER	ignores a command with one parameter, eg. <code>\foo{bar}</code>
PACKAGE	does not produce a Warning message if PACKAGE is encountered, eg. ‘PACKAGE,kleenex.’
ENVCMD	processes contents of unknown environment as if it were plain latex eg. ‘ENVCMD,iflatex.’ treats: ‘ <code>\begin{iflatex} text \end{iflatex}</code> ’ as ‘text’.
ENVIRONMENT	ignores contents of that environment, eg. with ‘ENVIRONMENT,ifhtml.’ ‘ <code>\begin{ifhtml} text \end{ifhtml}</code> ’ 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.’
```

5.5 ‘fonts.cfg’

The file ‘`fonts.cfg`’ contains the fonts conversion table. A line consists of a font name in L^AT_EX followed by comma and a font name in RTF. The end is marked by a ‘.’. No spaces are allowed. The L^AT_EX font will be converted to the RTF font if encountered in the L^AT_EX file. If multiple translations for a L^AT_EX font are specified, only the first is used. All fonts in a L^AT_EX 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 L^AT_EX font - for example a Symbol font used in `direct.cfg` - use a dummy L^AT_EX name like in the following example:

```
‘Dummy3,MathematicalSymbols.’
```

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

5.6 ‘language.cfg’

The file(s) ‘`language.cfg`’ control the traduction of L^AT_EX’s “hardcoded” sectioning names.

I have put in what I found with `grep "\renewcommand" *` in the L^AT_EX style directory (`teTeX`, `babel`), the tokens have the “name” stripped of and are all uppercase i.e. ‘`\contentsname`’ mutes to ‘`CONTENTS`’. Actually L^AT_EX₂rtf uses only `REF` and `PART`.

`CONTENTS` Contents.

`LISTFIGURE`
 List of Figures.

`LISTTABLE`
 List of Tables.

`REF` Bibliography.

`REFARTICLE`
 Reference (Bibliography in the article style).

`INDEX` Index.

`FIGURE` Figure.

`TABLE` Table.

`PART` Part.

`APPENDIX` Appendix.

`ABSTRACT` Abstract.

Actually there is an english, a german and a spanish Version. You are welcome contribute with ‘`language.cfg`’ files in other idioms to include them in the distribution. Send them to glehner@unanleon.edu.ni or latex2rtf@fz-juelich.de.

6 Error Messages and Logging of L^AT_EX₂rtf's Activity

Note: Error reporting and logging is one of the most chaotic aspects of the program. There are a lot of inconsistencies, but I hope to get it cleaner with time.

As stated in [\[Verbosity\]](#), page [\[Reporting Bugs\]](#), L^AT_EX₂rtf provides a means to control the amount of information it put's out on stderr.

Fatal error messages

indicate a bug in the source code. **PLEASE** report them, if they do not appear in the documentation, see [\[Reporting Bugs\]](#), page [\[Reporting Bugs\]](#).

Note: By now you won't be informed by the program if an error is fatal or not. Try to find it out by context ...

Error messages

always abort the program. They are thrown on conditions that do not allow further converting of the input file, but should be either documented as missing or unimplemented feature, or should be able to be corrected by the user (e.g. missing '.cfg' files).

Warning messages

inform you, that there is some conversion loss from L^AT_EX to RTF, or that the output file has some restrictions on some RTF Readers.

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

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

Note: Neither the inputfile may be correctly announced if '\input'ing it, nor can you rely on the linenumber, see [\[Known Bugs\]](#), page [\[Known Bugs\]](#).

The other messages only indicate 'filename' (sometimes wrong) and linenumber (also sometimes wrong) and some more or less usefull or interesting message. Don't try to encounter any sense in Verbosity levels above 3, these are for my own delight only and can change significantly between versions.

7 L^AT_EX₂rtf under Development

7.1 Unimplemented Features

- L^AT_EX passes the optional parameters of `\documentstyle` on to `\usepackage`, L^AT_EX₂rtf doesn't do this. L^AT_EX₂rtf now accepts optional arguments to `\usepackage`, but only uses them if they contain `latin1`
- Add more input encoding features (other `isolatin1` aproaches, other `codepages`,...).
- Add the code to produce the corresponding chapter, section informations and page numbering with `headings` and `myheadings` pagestyles. Implement `\markboth` and `\markright`.
- To include the `tableofcontents` there would be two approaches:
Transfer sectioning information, title text and let produce `pagenumber` 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.
- Separate the Scope of the Document Environment from the Preamble Environment.
- Rewrite the parser to allow some kind of macro expansion hence more flexibility in configuration and extension.
- `newcounter`, `newenvironment`, `newcommand`, ...
- Include the GNU `gettext` package to internationalize L^AT_EX₂rtf's Messages.
- Switch over to GNU `getopt()` and long options.
- Be able to generate `mac` RTF encodings?

Here comes a list of L^AT_EX-commands that are not implemented:

`'setlength, bigcap, dag, ddag, oe, OE, sharp, clubsuit, sim, nobreak, vspace, today, left-((, right-))'`

7.2 Missing and Faulty command line options

In this section you find comments about missing and buggy command line options.

`'-v'`

The Version information output is not compatible with the GNU Coding Standards.

`'-v'`

Information logging and Error reporting is not implemented consistently. So do expect confusing Messages and inconsistent format. The `linenumber` and `filename` of the offending spot in the input in the most cases is not correctly determined.

`''`

There should be an option to intersperse RTF-Output with the L^AT_EX-input that produced it to have a better hand for debugging.

‘-o’

Actually you *must* specify an output filename. Maybe further on the meaning of this option changes, as writing ‘-o filename’ takes more typework than ‘> filename’. Either you *may* specify the name, or you *must not* do it, depending on whether we choose to use GNU getopt or not.

‘-l’

There is only one coding scheme for the input file, ISO-Latin1.

‘-q’

There should be a ‘-q’ (quiet) option, to suppress Warning Messages. By now this can be achieved by the -v 0 option.

‘-rmajor.minor’

There should be an option that restrict the generation of RTF code with version greater than *major,minor*. Actually this is done at compile time. There are some Warning messages if "newer" RTF Code is generated, but it is not consistent at all.

‘-h’

The default values for search pathes and switches changeable by commandlineoptions should be shown.

There is a need for a ‘--language’ option (‘-l’ is yet used, and could be changed to -e # (-encoding). ‘-i’ as for ‘--international’ is chosen meanwhile so that the user can select an alternate language file, see (undefined) [Output formatting], page (undefined).

It would be useful to implement the GNU long option names, e.g.: ‘--verbosity’, ‘--output_file’, ‘--quiet’, etc.

7.3 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. L^AT_EX₂rtf is only strolling from left to right through the text and can’t remember what she will see in the future.

2. The optional argument of `\item[...]` in the `description` environment is converted to isolatin1 if applicable, but not L^AT_EX converted. Try ‘`\item[Best~Friends]`’.
3. The `\section*` command is accepted, but as I don’t know how to produce a section without numbering it in rtf it does precisely this: print a section number.
4. CmdLabel can generate rtf1.4 Page references and Bookmarks, but Section References only with restrictions:

The section reference copies the information of the ‘.aux’ file to a locked rtf field. The better way would be, to include the section text in a bookmark if there is a label following, and write the bookmark with the label name, since then Word could update the section information.

5. The `diagnostics` routine does not output the correct (actual) inputfilename. (`‘.aux’`, `‘.bbl’`, `\input`).
6. The `@LaTeX{}` macro of this document does NOT produce the correct L^AT_EX-Logo. Somebody can send me a correct version, and for L^AT_EX₂e also?!
7. To provide the end-of-line-code features a "cleaned up" temporary file is written and then read in as inputfile. This gets us into other troubles with input redirection and `‘\input’/‘\include’`ed L^AT_EX-files. This procedure is meant as a temporary means to provide this functionality and will be removed in the future.

7.4 Reporting Bugs

Report bugs to `<glehner@unanleon.edu.ni>` (Georg Lehner). Ralf Schlatterbeck is no longer the maintainer and will forward all mails refering L^AT_EX₂rtf to me. Please give the following information and observe the following guidelines when reporting a bug in the program:

Tell me the version of the program. For the executable you get the version by specifying the `‘-V’` option to L^AT_EX₂rtf. For the sources the version is the version number of the file `‘version.h’`.

The Operating System and version number where you are running or trying to install L^AT_EX₂rtf. 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 writing to me.

For problems with the DOS version, report installation problems to the mainainer of the DOS port, Vladimir Menkov, `<vmenkov@cs.indiana.edu>`

If the program produces wrong output or does not work for you, include a short L^AT_EX file along with a description of the problem. Do not send me large L^AT_EX or rtf files, I simply do not have the time to wade through large files to search for a bug! If necessary (i.e., the program produces wrong or invalid rtf), send the rtf file that is produced along with the L^AT_EXinput file.

Be patient with me. 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.

7.5 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 a Testsuite.
- Be more specific about implementing on Unix Platforms.
- Provide an Error and Warning recovery guide to the user.
- Explain details of the MSDOS executable in a separate chapter.

- Add a chapter with lists of all L^AT_EX commands that convert, and that do not convert to RTF, including their status (for future releases, never, partially functional, ...).
- The following comes from Ralf:
 - Redesign the input routines -> do not use lseek -> then the program can read from pipes.
 - Change the Makefile to use default rules for generating .o files. Also use generic rules in some other places (clean target)
 - For ignored commands the number of arguments to ignore should also be given
 - Environment definition produced with \newtheorem should be supported
 - Move version control archive (currently RCS) to CVS.
 - Change how the current version is computed (currently version.h defines the version of the whole package this should change to a CVS (or RCS) version tag from which a version.h file should automatically be generated).

Index of Commandline and Configurationfile Options

(Index is nonexistent)

Index of Concepts

(Index is nonexistent)

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