

Package: lyxport (via r-universe)

November 27, 2024

Version 1.0.135

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Imports mvbutils, Rcpp

LinkingTo Rcpp

Title LyX to MSWord etc

Description Tools for smooth Lyx export via pandoc, currently to MSWord but to potentially other formats

SystemRequirements LyX, pandoc, ImageMagick

License GPL-2

Collate lyxport.R Cloders_lyxport.R

Config/pak/sysreqs libmagick++-dev gsfonts

Repository <https://markbravington.r-universe.dev>

RemoteUrl <https://github.com/markbravington/lyxport>

RemoteRef HEAD

RemoteSha f20c026348812f2b2d42a1408a6542690658f1fb

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 lyxport-package

How to use the lyxport package

Description

The lyxport R package is for exporting LyX documents to MSWord— which I sometimes have to do, under duress— and perhaps other formats. Unlike LyX’s built-in MS Word Open Office XML export, lyxport does proper cross-referencing including tables, figures (correctly sized), lists, equations, appendices, and bibliography. Most of the heavy lifting is still done by Pandoc, as in LyX’s built-in export option; but Pandoc— wonderful though it is!— doesn’t get everything right even with well-known filters (as you have probably discovered yourself by now, else you mightn’t be reading this). So the package contains a lot of behind-the-scenes fiddly code in order to save you lots of manual post-tinkering.

Once you’ve installed the package, run [lyxprefhack](#) to set things up for direct use from LyX. Then you should see an "MSWord (lyxport)" option in "File->Export", and a "lyxport" item at the end of "Help->Specific manuals", where the full package documentation lives. To see the features, do "File->Open example" and filter for "lyx", to open "lyxport-demo.lyx". I haven’t tested every LyX feature; it’s mostly just stuff I need. More things might get added.

The package currently has 3 user-visible functions: [lyxprefhack](#) for setup, [lyxzip2word](#) for the main conversion, and [requote_lyx](#) to help sort out quotation marks, mainly in case your document includes imports from other formats such as plain-text. From R, you are only likely to call the 1st (once) and perhaps the 3rd; [lyxzip2word](#) is normally called by LyX on your behalf, when you export to "MSWord (lyxport)".

Just in case

[lyxprefhack](#) makes a number of assumptions about your LyX config files (for good reasons). It works for me, but that could be dumb luck; if it goes wrong for you, be aware that it makes backups of your "preferences" and "ui/stdmenus.inc" files— so you can manually restore them. If you can’t see "lyxport" as a help option, try typing "help-open lyxport-docu" in the minibuffer. And you can also see a PDF version of that documentation in R, via `RShowDoc("Lyxport-docu", package="lyxport")`.

 lyxprefhack

Prepare LyX for better export to MSWord

Description

This function should be called just after you install the **lyxport** package, and you probably won’t need to call it again. It modifies your LyX "preferences" file to add better MSWord export, with shortcut "W" in File->Export; see **Details**. It also creates a LyX help file and an example that you can access straight from LyX— so you may never need to use this package again from R, since almost everything you need is accessible from LyX itself. (One exception is if you want to use [requote_lyx](#) (qv) to sort out quotation-mark problems. Many people will never need it.)

Usage

```
lyxprefhack( userdir)
```

Arguments

`userdir` Where your config files live; see section 2 of LyX's "Customization" manual. R will prompt you for it if you don't set the parameter, so you can copy it from "Help->About" in LyX; single backslashes are OK.

Details

To enable automatic export from LyX, you need to add two Preference settings inside LyX, either manually or by editing the "preferences" file in your LyX Userdir. The function `lyxprefhack` will attempt to do the latter, at your own risk.

The two settings can instead be set manually inside LyX, from the "Tools->Preferences->File Handling" menu. First, define a new File Format, which should be a copy of LyX's built-in "MS Word Open Office XML" but with a different name. The only fields you absolutely need are:

- Format name: MSWord (lyxport)
- Tick the boxes for "Document Format", "Show in Export menu", and "Vector graphics format"
- Short name: wordx
- Extensions: docx
- Shortcut: you don't *need* this, but I use "W" so I can export via "Alt-F E W"

Second, you need to define a Converter, as follows:

- From: Lyx Archive (zip) - *not* from straight LyX!
- To: MSWord (lyxport) - ie the name of the new Format
- Converter: Rscript --no-save --no-restore --verbose -e lyxport::lyxzip2word(FROM_LYX=TRUE) \$i \$r \$p 1 > docxconv.log 2>&1

When the converter runs, it will write a logfile into LyX's temporary folder, which unfortunately is a bit hard to find if things go wrong (if they don't, you don't need to find it). Weirdly, if you try to put the logfile into the "main" folder (ie where source and export live), by using "\$r/<something" after the redirect, then LyX says it can't execute the command...

Value

Overwrites the "preferences" file (unless there's no change required), after backing up the old one to "old_preferences<N>" (guaranteed not to overwrite any existing backup). Adds a "lyxport" option to "Help->Specific manuals", in the file "ui/stdmenus.inc", again making a backup of the latter if there's any change. Copies one file from the R installation to LyX's "<userdir>/doc" ("lyxport-docu.lyx") and one set of files to LyX's "<userdir>/examples/lyxport" ("lyxport-demo.lyx" and associated files).

See Also

[lyxzip2word](#), [lyxport](#)

Examples

```
## Not run:
lyxprefhack()

## End(Not run)
misc
```

 lyxzip2word

Convert LyX to MSWord or other format

Description

lyxzip2word starts from a "LyX archive" (zip export from LyX) and converts to MS Word (or potentially other formats) using various tools, mostly Pandoc. See `RShowDoc("lyxport-docu", package="lyxport")` for more information about normal use from LyX, and any requirements of your LyX source file (eg specifying the bibliography format).

You don't normally need to know anything about this function, since it is called automatically from LyX. However, I should document it for maintenance-type reasons. Also, if you want to experiment with exporting to other formats, you might want to use it direct from R, setting the `outext` and `panoutopts` arguments.

Usage

```
lyxzip2word(
  zipfile,
  outext= 'docx',
  panoutopts= outext,
  origdir= dirname( zipfile),
  tempdir= base::tempdir(),
  copy= FALSE,
  FROM_LYX= !interactive(),
  refdir= NULL,
  lyxdir= NULL,
  lyx_userdir= NULL,
  natnum_pandoc= FALSE, # devil or deep-blue-sea?
  crossref_pandoc= TRUE,
  verbose= FALSE,
  dbglyx= ''
)
```

Arguments

`zipfile` Name of input file, normally a LyX-zip archive with a path. Extension is optional, but ".zip" is assumed. If (for experimentation only) the extension is ".lyx", then all the other necessary files had better be in `tempdir`, which had better be the same folder as the in-fact-not-zippy `zipfile`.

outext	File extension of output.
panoutopts	For pandoc's writer, to tell it what kind of output to produce, ie pandoc's "-t" argument. Normally the default of outext is fine, but there might be other useful options for specific writers, eg "markdown+myfilter-theirfilter".
origdir	where zipfile lives, and where the output should go; deduced from zipfile if missing.
tempdir	where to unpack the zipfile and create temporary files etc.
copy	whether to copy zipfile to tempdir (leaving the original in place), or <i>move</i> it (in which case the original is "lost"). Normally it's fine to just move it, because the zipfile is only a temporary step in the creation of your magnificent MSWord-flavoured document..
FROM_LYX	set TRUE iff called from inside LyX by a Converter, in which case zipfile, origdir, tempdir, and possibly dbglyx will be set according to commandArgs .
refdir	Top of the folder-tree for bibliography-finding. It should have a folder ./bibtex/bib/ underneath it, containing dot-bib files. It is normally found by automatic magic.
lyxdir	Where Lyx executable lives. However, you should probably make sure Lyx is on the search path anyway, otherwise things may not work; if it is, then you can leave this NULL.
lyx_userdir	what you'd pass in the "-u <userdir>" option when starting LyX. However, as of Lyx 2.4.2.1, there's a bug which stops that working (in the particular context of lyxzip2word). What this means is, you can't use your own private layouts/modules in your own userdir tree; you'd have to copy them to Lyx's system layouts folder.
natnum_pandoc	whether to turn on pandoc's own numbering scheme (when reading and when writing). More trouble than it's worth so far, hence the default is FALSE.
crossref_pandoc	whether to use the "pandoc-crossref" filter when reading the Latex source. The default is TRUE, but lyxzip2word actually has to spend quite a bit of time fixing incorrect xrefs, and I suspect I could get FALSE to work with just minor mods, leading to one less "dependency". But everything's fine at the moment, so leave well enough alone.
verbose	if TRUE
dbglyx	Only for debugging, obvs. Should be blank, or a positive integer as per "lyx -dbg". Any number will also cause R to print out various things, such as paths.

Details

The steps in the conversion process are (actually there's more than this, this list is out-of-date...):

- Move & extract zip file
- Generate Tex, by running "lyx -export"
- Merge any input/include files
- Add eqn labels: eqn_labels_for_word()
- Check and prepare bibliography

- Twiddle any appendices, so as to not confuse pandoc
- Export Tex -> pandoc-native: pandoc
- Fix labelled-eqn column widths: eqalignfix()
- Perhaps move the bibliography to before appendices
- Export pandoc-native -> docx: pandoc

Value

Should produce a file "<zipfilename>.<outext>" in folder origdir. There will also be various files tempdir (which will be LyX's session tempdir, if this was invoked from LyX itself), including a logfile "docxconv.log" which should/might contain useful error messages if there are any. Look carefully thru LyX's "View->Messages" window to see where that LyX tempdir is (it changes from one LyX session to the next). The formal R return-value of lyxzip2word is TRUE or FALSE according as whether it thinks everything worked.

See Also

[lyxport](#)

Examples

```
## Not run:
# In LyX, open the "lyxport-demo.lyx" example, then File->Export->Lyxzip. Then try exporting
# to a non-MSWord format, via eg...
lyxzip2word( 'lyxport-demo.zip', outext='html' )

## End(Not run)
misc
```

requote_lyx

Clean up LyX quotation marks

Description

This function *tries* to sensibly turn assorted types of quotation marks in a LyX document into LyX "dynamic quotes". The latter make it easy to render the document with any of a number of defined "nationalesque" quotation schemes, just by tweaking a single item in Document->Settings->Language. For example, you can get outer double/inner single quotes, outer single/inner double, guillemets, and so on; see "Quotation marks" in the LyX UserGuide (currently section 3.9.4.2). Without this functionality, a large LyX document can end up having multiple types of quotation marks (especially if it is multi-authored or includes excerpts of other documents), which can't easily be changed or searched for or made coherent.

Not all quotation marks should be changed: for example, straight quotes within listings or ERT should be left alone. `requote_lyx` tries to get that right. However, many funny-looking things come out OK when exported to Latex (which is a necessary step in producing eg nice MSWord documents, using the other functions in this package).

`requote_lyx` mainly aims at double-quotes (since IME these are the commonest defaults for normal quotation), but does some single-quote stuff too:

- Apostrophes are left alone (deliberately; they are tricky!)
- Any explicit single quotes are made dynamic, but their singleness is kept; it's assumed to be deliberate.
- Hard-wired directional single-quote characters are turned into dynamic *double* quotes, just like hard-wired directional double-quotes. Coz that was *probably* the intention of an author who just prefers single-quotes for outer.

requote_lyx isn't aiming at perfection, and may well not be foolproof; there might be situations where it doesn't work properly, because LyX used some structuring that I hadn't anticipated. Sorry.

Usage

```
requote_lyx( filename = NULL, lyx = NULL, outfile = NULL)
```

Arguments

filename	optional name of file to read from
lyx	or you can pass the actual text in directly, as a character vector
outfile	optional filename to write the output to.

Value

The modified LyX text will be returned, invisibly. Also, if `outfile` is not `NULL`, the modified LyX text will be written to `outfile`.

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