

SumatraPDF 3.x and SyncTeX to/from LyX for Windows 2.3.x

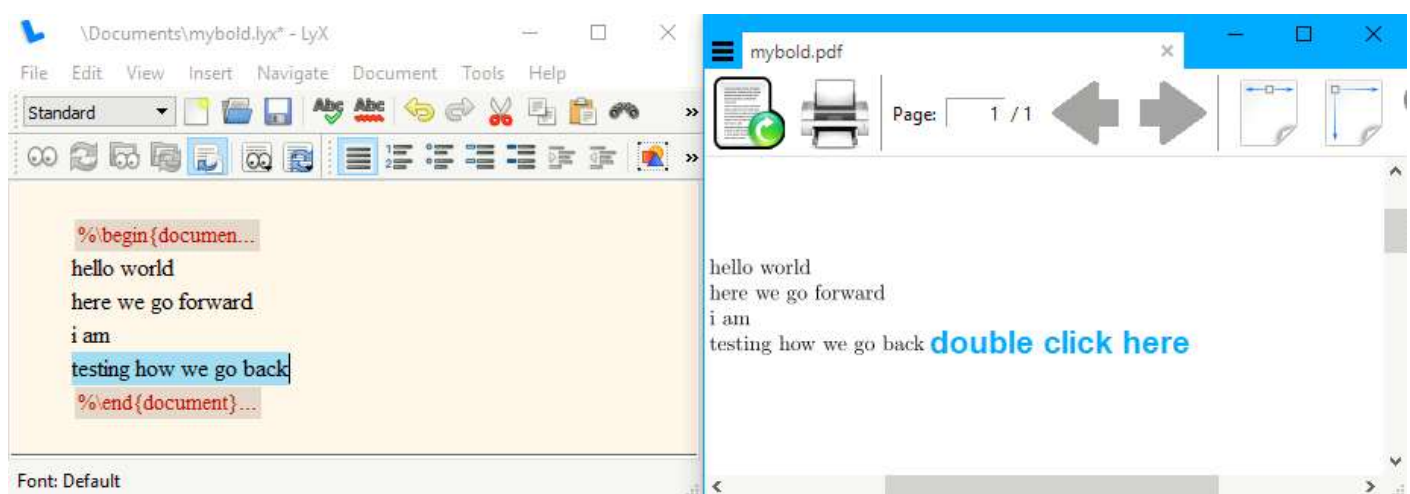
MiKTeX users are advised to update to a 2019 version before installing LyX 2.3+ for windows.

Note:- using a permanent installation of SumatraPDF you only need to set inverse-search ONCE

The **InverseSearchCmdLine** = is permanently stored in *SumatraPDF-settings.txt*. It does not have to be configured in the editor, unless you have to re-install SumatraPDF or otherwise replace SumatraPDF-settings.txt i.e. due to unwanted system reboot when it may rebuild automatically (make frequent backups!)

Settings in SumatraPDF

The goal here is to ensure a double click in SumaraPDF will highlight the coresponding line in LyX



MyNotes *There will be a momentary flash of a cmd window as the return call is made.*

Notable differences to the current LyX SyncTeX guide [1] are we avoid some unnecessary calls.

SumatraPDF should be installed so it will function from any system call as **SumatraPDF**, this means it **ideally** be "on path". If using a portable version SumatraPDF.exe can be temporarily added to UserEnv path before calling LyX.exe e.g. in startup.cmd file `set path = %exepath%;%path%` .

Run SumatraPDF and go to Settings > Advanced Options... this will open SumatraPDF-settings.txt in NotePad, now going down the entries check or change the following.

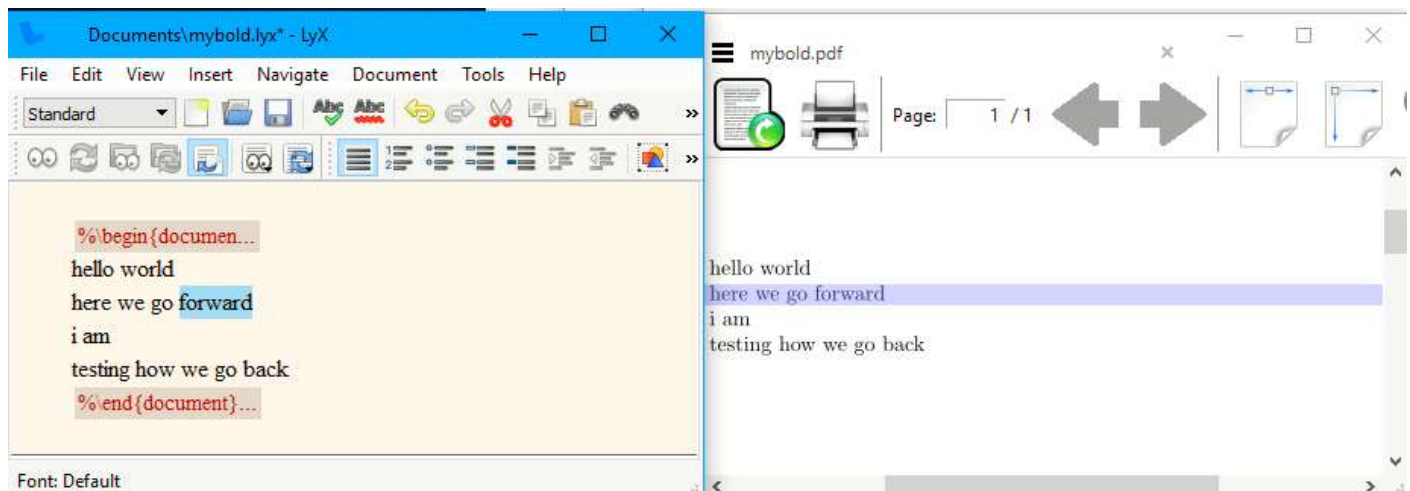
```
ReuseInstance = true
ReloadModifiedDocuments = true
InverseSearchCmdLine = cmd /c (echo LYXCMD:revdvi:server-goto-file-row:%f %1) > \\.\pipe\lyxpipe.in
EnableTeXEnhancements = true
UseTabs = true
```

DON'T FORGET TO CTRL+S (File Save)

[1] <https://wiki.lyx.org/LyX/SyncTeX>

Settings in LyX

The following settings will allow for right-click build PDF and Forward Search line in SumatraPDF



Using the SyncTeX guide at <https://wiki.lyx.org/LyX/SyncTeX> and removing depreciated options for speed.

"(Note: inverse search of .lyx files with spaces or other special characters in the file name does not work with this approach on some Windows systems)"

MyNotes due to this unique method of calling a pipe [2] used by **LyX in Windows**, there is currently no way round the requirement that **the working files and paths MUST NOT HAVE A SPACE**. So if that does not work for you then you will need to raise any issues with LyX support. If they provide a simpler way of calling an active LyXserver session with a remote quoted filename path, then please let me know. The issue is that LyXserver expects two sequential values 1) the SyncTeX supplied .tex filename 2) followed by the line number, so when a filename contains spaces the first part is not valid as a filename and the second part is clearly not a number, It may work if filenames are parsed as older 8.3 format but most modern Windows files use LFN format. It may be different using old cygwin versions e.g. call LyXeditor -g "%f" %1 .

Notable differences compared to the guide are DO NOT add the **depreciated** -reuse-instance or -inverse-search options/directives, they are not needed and potentially slow down the **required -forward-search**.

Tools → Preferences...

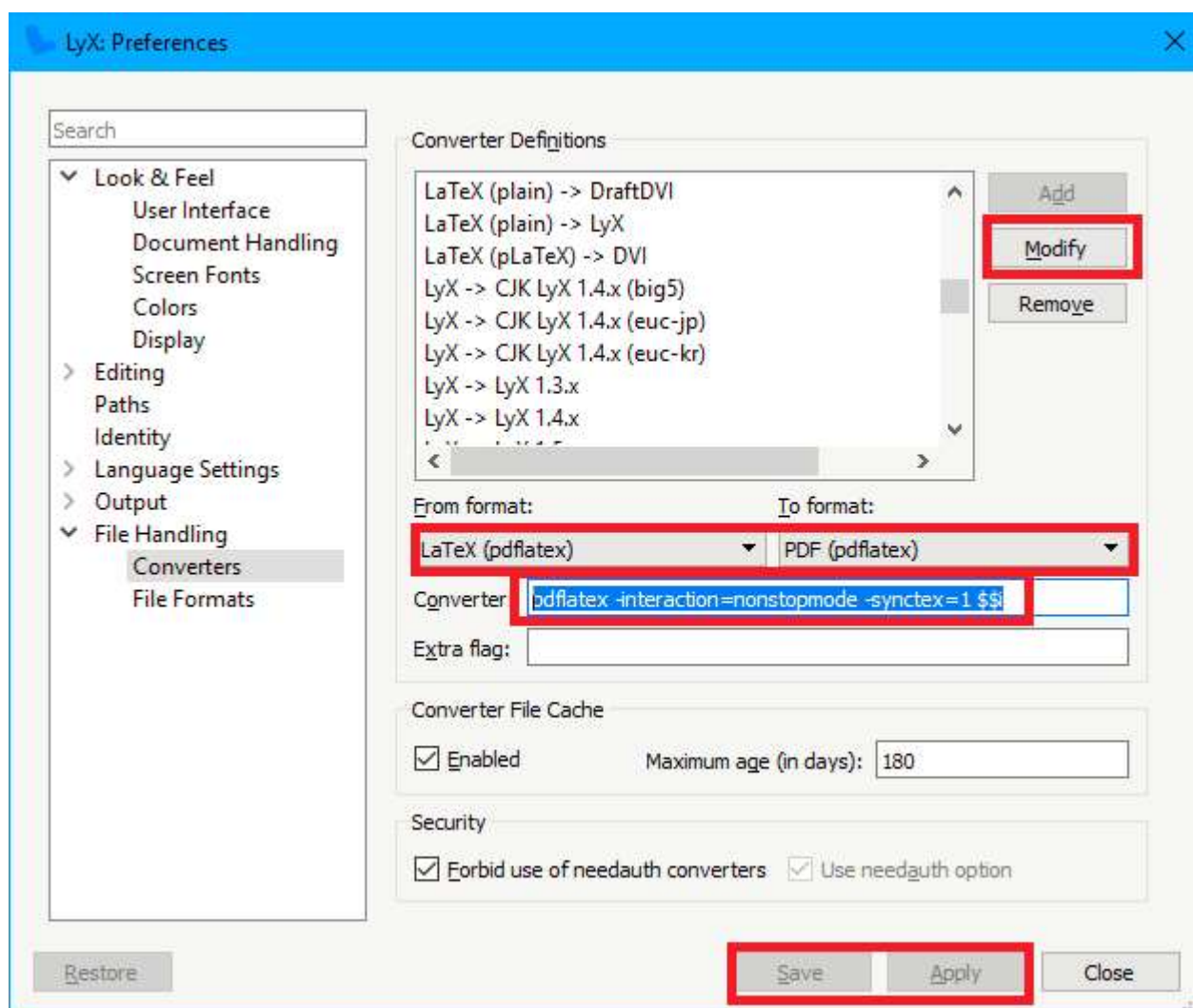
- On the left select **Paths** (see left hand side of screen on next page)
- Check Working Directory: and Temporary directory: do NOT have any spaces
- Set the line LyXServer pipe: to `\\.\pipe\lyxpipe` (copy & paste without spaces DO NOT [Browse..])

MyNotes Since this memory location is only generated and available whilst LyX.exe is running, it is essential to start LyX before SumatraPDF can use it for inverse search. Unlike LyX most TeX editors use a CLI option & can be started with "quoted filenames" by double-click in SumatraPDF.

- Optionally add the directory where SumatraPDF.exe resides, to the **semicolon;separated** PATH prefix: line. (This should not be needed for a permanent install but may help for portable users)

[1] <https://wiki.lyx.org/LyX/SyncTeX>

- On the left select **Output → General** (see left hand side of screen shot below)
- In the “forward search” section set the entry PDF command: to `SumatraPDF "$$o" -forward-search "$$t" $$n`
- On the left select **File Handling → Converters** (see left hand side of screen shot below)
- Select the From & To format: LaTeX (pdflatex) -> PDF (pdflatex) (if needed Add first)
- Set the Converter to `pdflatex -interaction=nonstopmode -synctex=1 $$i` (that is small i at the end)
Click **Modify** (otherwise the change will be discarded). This change is needed to make MiKTeX produce a FILE.synctex.gz file.



- On the left select **File Handling → File Formats** (see left hand side of screen shot above)
- Select the format **PDF (pdflatex)**
- Set the **Viewer** field: to `SumatraPDF`

Usage

- You may need to close *all* SumatraPDF windows and use “Document → View” once after edits
- After that you will need to right-click Forward Search to search forwards

Troubleshooting

There is not much a user can do to check the named pipe calling sequence and it took several aborted calls check all possible variations of the call to lyxpipe. This is the **suggested command** for SumatraPDF.

```
InverseSearchCmdLine = cmd /c (echo LYXCMD:revdvi:server-goto-file-row:%f %l) > \\.\pipe\lyxpipe.in
```

It is NOT possible to use "%f" it will fail. (filenames with spaces **converted to 8.3 format may work** via %f)

IT IS possible to switch from /c to /k which will allow you to run **type** [\\.\pipe\lyxpipe.out](#) at the console

To avoid retyping a request for info you can combine /k and add "type ..." after the .in above thus becomes
cmd /k (echo LYXCMD:revdvi:server-goto-file-row:%f %l) > [\\.\pipe\lyxpipe.in&&type \\.\pipe\lyxpipe.out](#)

There is not much to see other than some of the following errors which may or more likely not give a clue.

Error occurred while processing:

INFO:revdvi:server-goto-file-row: (5 or more multiple entries ! when the call **either failed or succeeded !!**)

No process is on the other end of the pipe.

The filename, directory name, or volume label syntax is incorrect.

The system cannot find the file specified.

[1] <https://wiki.lyx.org/LyX/SyncTeX>