

Technical Work

Raymond Yip

2022-09-25

This document will be a log of my work. My work includes everything related to my tech career, e.g. my paid job, my personal projects, personal setup, freelance, .etc. My learning experience can appear here as well but I will set up another folders for storing my learning notes.

1 2022-09-25

Today I have tried debugging vimtex by exploring its source code. The error I faced is viewer cannot find Zathura window ID. I have no idea how I get this error at first. Because I have already installed Zathura on wsl, (plus a bunch of other softwares, e.g. vcsxrv, x11-apps) and the zathura is working on my wsl. I can open a pdf window in wsl terminal to view documents in windows. So it must not be related to Zathura installation problem.

I have tried change the setting: delete the default `g:vimtex_viewer_method = "zethura"` and change to `g:vimtex_viewer_general_viewer = "zethura"` in `init.lua` instead. It works. I can now use Vim.

That's why I decided to inspect the source code of vimtex and see the line that calls the zethura command. After inspecting the function and learning about vimscript language, I locate a self. *start method and in sepct the function called in side this method. After 1-2 hours, I found the line calling the shell command of zethura and pdf file, which is :*

```
if a:start let l:cmd .= ' ' . g:vimtex_viewer_zathura_options if a : synctex let l:cmd. = printf( ' -x' s : inverse_search_cmd) endif endif
if a:synctex (!a:start — g:vimtex_viewer_forward_search_on_start) let l:cmd. = printf( ' —synctex-forward line(' .', col(' .'), vimtexutilshellescape(expand('endif
return l:cmd . ' ' . vimtexutilshellescape(vimtexpathsrelative(a:outfile, getcwd())) . " endfunction
```

So, the problem lies in the flag argument passed to the zathura command when opening pdf. I have tried to use the same flag:

```
zathura —synctex-forward 28:1:hello.tex hello.pdf
```

It gives an error of course. Bingo! Now the error probably springs from this command. So i went on to google this error and the solution is install dbus-x11. Go ahead and all errors are gone.