

Coding Annoyances

How to collaborate with Scientific Workplace users

01 April 2014 · Rubén Hernández-Murillo ·

When writing papers in latex, I usually use WinEdt and MikTeX (more recently, I started using SublimeText with TexLive), but most of my co-authors only use *ScientificWorkplace* with the dated TrueTeX latex engine.

In preparing papers, I like to have the following folder structure:

```
1. bibfiles/
2. project-files/
3.   |
4.   |-plots/
5.   |-tables/
```

But this does not work for SWP because in order to compile the main document, it copies the tex file to a temporary file under a temporary folder, and therefore, SWP cannot find any folders or graphics included with `\input` or `\includegraphics` that are in the above subfolders. SWP also cannot find any `bib` files, unless the `bibfiles` folder is appropriately selected in the general settings, or the `bib` file is copied to the standard folder: `c:\SWP\folder\TCITeX\TeX\BiBTeX\bib\`.

The solution, which does not require to manually edit any settings file under SWP (which does not work anyway), involves three steps:

1. To fix the issue with finding graphics files (e.g, `.png` or `.pdf` files, because I use `pdflatex`), include the following commands in the preamble. Notice the two sets of braces and the trailing `/`. The path can be absolute or relative (see 2).

```
1. \usepackage{graphicx}
2. \graphicspath{ {/path/to/graphics/folder/} }
```

2. To be able to work with relative paths and subfolders we have to prevent SWP from copying the main tex file to a temporary folder when compiling. This is achieved by setting the main tex files as a `master document`. Include the following code somewhere after `\begin{document}`:

```
1. %TCIMACRO{\QSubDoc{Include subdoc}{\input{tables/subdoc.tex}}}%  
2. %BeginExpansion  
3. \input{tables/subdoc.tex}  
4. %EndExpansion
```

The file `subdoc.tex` located in the `tables/` folder has to include the following code (and it can be empty otherwise; it can also be located in the main folder, but the paths above have to reflect this):

```
1. %TCIDATA{LaTeXparent=0,0,main.tex}
```

where `main.tex` is the name of the master file. For additional files in the `plots` and `tables` subfolders, the TCI macro is not needed, and the usual `\input` or `\includegraphics` commands will work and the tex or graphics files will be found.

3. As mentioned before, to find the correct `bib` files, the options are to change the standard path in SWP's general settings or to copy the `bib` files to the standard path under the SWP installation folder, `c:\SWP folder\TCITeX\TeX\BibTeX\bib\`.
4. Finally, it goes without saying that your coauthors should always save project files in Portable LaTeX format.

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