SumatraPDF with TeXnicCenter

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1 Short Introduction

This tutorial describes the use of SumatraPDF viewer (v 3.x) in combination with TeXnicCenter (v 2.x).

After successful setup SumatraPDF recognizes changes in the PDF fle which results from repeated compilation in TeXnicCenter and updates its document view automatically. You do not have to close and restart the program by hand every time. By pressing the F5 button in TeXnicCenter, SumatraPDF shows the page and the section the cursor resides in. Regrettably SumatraPDF does not come to the front automatically.

A double click in the PDF should set the editors cursor to the corresponding section. TeXnicCenter comes to the front by doing this.

2 Software

Download SumatraPDF at https://www.sumatrapdfreader.org/download-free-pdf-viewer.html
Download TeXnicCenter at http://www.texniccenter.org/download/

It is assumed that you have a LaTeX distribution already installed, e.g. MiKTeX (http://miktex.org/) basic install includes the ability to load packages as required later, TeX Live (http://www.tug.org/texlive/) also does the job. However, TeX Live install is around 6GB once unpacked or for CJK it's normally W32TeX http://w32tex.org/ .

In any case you should update the format fles by using the MiKTeX, TeX Live or W32TeX file manager.

3 Settings in SumatraPDF

Open 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

For the following entry use windows explorer to find the **exact** location of TeXnicCenter, it may vary for different languages or where the 64bit or 32bit version of TeXnicCenter was installed. If you later find a second window unexpectedly opens in TeXnicCenter when the same TeX file is already open then you may need to double check this path again.

InverseSearchCmdLine = "C:\Progr...\TeXnicCenter\TeXnicCenter.exe" /nosplash /ddecmd **"[goto('%f','%l')]"**
EnableTeXEnhancements = true
UseTabs = true

Beware: If you copy the above command lines and paths from e.g. Adobe Reader you may get an accent (wrong) in place of an apostrophe (right) This breaks functionality. IF so replace them.

DONT FORGET TO CTRL+S (File Save)

4 Settings in TeXnicCenter

It is useful to define an extra output profle for SumatraPDF:

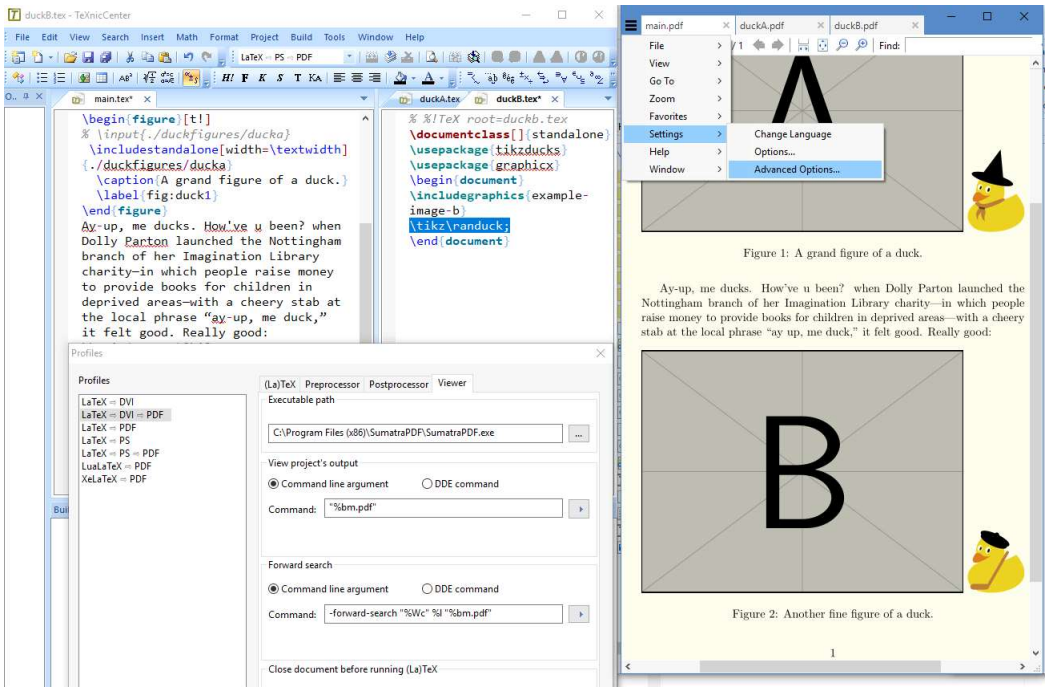
press Alt+F7 (or on menu bar click Build > Define Output Profiles)

1. Click in the existing profle LaTeX=>PDF
2. At the bottom Click Copy
3. Name the new profle, e.g. **LaTeX=>PDF (View in SumatraPDF)**
4. Check that the new profle is highlighted. There are 4 tabs: (La)TeX, Pre & Postprocessor and Viewer.
5. Quickly check on the (La)TeX tab if the path to (La)TeX compiler path is correct (**path names vary**): C:\Program ...\texmfs\install**miktex\bin\pdflatex.exe**
6. Command line arguments to pass to the compiler should be the following **-synctex=-1 -interaction=nonstopmode "%wm"** *(an older alternative ending can be* ***"%Pm"*** *)*
7. On the Viewer tab at Executable path insert the following line (**path names vary**): C:\Program ...**SumatraPDF\SumatraPDF.exe** *(you can click ... on the right and browse for it)*
8. At View project's output set the radiobutton to Command line argument & for Command: **"%Bm.pdf"**
9. At Forward search set the radiobutton to to Command line argument and at Command: insert **-forward-search "%Wc" %l "%Bm.pdf"** ***(if you get issues with file opening use lower case)***
10. At Close document before running (La)TeX set the radiobutton to **Do not close**. *(works up to 10MB)*
11. Check all 5 or 6 **=>PDF profile** > viewer tab options are the same (Copy and paste) now hit OK

Furthermore you may use \include for embedding other .TeX fles. If you use \input you may have to append the file endings.

Whistles and Bells (Extra bonus features with recent SumatraPDF)

In SumatraPDF Settings > Advanced options there are settings for color of forward search highlight etc.



If you have a whatever.pdf, whatever.synctex(.gz) and whatever.tex file in the same folder then you can start by opening the PDF and a double click anywhere will open the TeX editor with the cursor at the right file position even if the editor was not started first.

If you have multiple (or portable) editors you can set up BATch ComManDs to change the editor name/path via an external **-inverse-search call** to SumatraPDF however it **only needs to be done once per session not at every internal call from the editor.**

If you are running on Linux (via Wine etc.) some placeholders may need to change case see the following:-

Placeholders Appendix from TeXnicCenter 2.0 documentation ***(Including numerous corrections)***

A very powerful feature of TeXnicCenter are placeholders. They are used on occasions when values or commands need to be specified that will change dynamically during runtime. This feature allows the user a very flexible configuration of TeXnicCenter because command line arguments, DDE-commands or other values do not have to be specified statically, but will be dynamically generated by TeXnicCenter when needed.

Placeholders are a kind of variables. The user specifies the name of the variable and TeXnicCenter sets the variable's value dynamically by replacing its name with the current value, when needed.

There a two types of placeholders in TeXnicCenter:

Placeholders for single files (%).
This type of placeholder is often used to define command-line arguments and DDE-commands.

Placeholders for sets of files ($).
This type of placeholder is used to deal with more than one file at a time.

Placeholders for single files

Placeholders referring to single files are used in such cases, where arguments for command line tools (like LaTeX) and DDE-commands need to be defined.

Placeholders for single files have to begin with a percent sign % followed by up to three characters. The last character specifies which files the placeholder refers to:

m Current project's main filename.
c Current filename, i.e. the file opened in the editor that has the input focus.

The character before the last character describes how to reference the specified file:

p The file's fully qualified path.
w The file's relative path starting in project directory, i.e. working directory.
d The file's directory.
n The file's name (name and extension).
t The file's title (name without extension).
e The file's extension.
b The file's base (fully qualified path without the file extension).
r The file's drive letter (followed by colon :).

Instead of p, w, d and m use the UPPERCASE variants of these characters to get slashes / instead of backslashes \\ as path separators.

The percent sign % can be followed by an s. In this case, the placeholders will be replaced with paths matching the old 8.3 path convention.

To get a percent sign in the resulting string you have to use %% which will always be replaced by %.

Placeholders referring to project's main file

The following placeholders are used as a reference to a project's main file. If the Build > Current File... command is used, these placeholders will be replaced with the equivalents for the current file.

The examples show how the placeholder will be replaced, if the current project's main file is

C:\My Documents\TxcTest\JustATest.tex.

%pm Will be replaced by the full path of the current project's main file, e.g.
C:\My Documents\TxcTest\JustATest.tex

%wm Will be replaced by the relative path of the current project's main file, e.g. JustATest.tex

%dm Will be replaced by the directory of the current project's main file, e.g. C:\My Documents\TxcTest

%nm Will be replaced by the name of the current project's main file. The name includes the file extension, e.g. JustATest.tex

%tm Will be replaced by the title of the current project's main file. The title does not include the file extension, e.g. JustATest

%em Will be replaced by the extension of the current project's main file. tex

%bm Will be replaced by the base of the current project's main file. The base includes the directory followed by the file's title without the file extension, e.g. C:\My Documents\TxcTest\JustATest

Placeholders with slashes instead of backslashes

%Pm Same as %pm but using slashes instead of backslashes, e.g. C:/My Documents/TxcTest/JustATest.tex

%Dm Same as %dm but using slashes instead of backslashes, e.g. C:/My Documents/TxcTest

%Bm Same as %bm but using slashes instead of backslashes, e.g. C:/My Documents/TxcTest/JustATest

Placeholders for 8.3 path notation

%spm Same as %pm, but using the 8.3 path notation, e.g. C:\MyDocu~1\TxcTest\JustAT~1.tex
%sdm Same as %dm, but using the 8.3 path notation, e.g. C:\MyDocu~1\TxcTest
%snm Same as %nm, but using the 8.3 path notation, e.g. JustAT~1.tex
%stm Same as %tm, but using the 8.3 path notation, e.g. JustAT~1
%sem Same as %em, but using the 8.3 path notation, e.g. tex
%sbm Same as %sbm, but using the 8.3 path notation, e.g. C:\MyDocu~1\TxcTest\JustAT~1

Placeholders for 8.3 path notation with slashes instead of backslashes

%sPm Same as %spm, but using slashes instead of backslashes, e.g. C:/MyDocu~1/TxcTest/JustAT~1.tex
%sDm Same as %sdm, but using slashes instead of backslashes, e.g. C:/MyDocu~1/TxcTest
%sBm Same as %sbm, but using slashes instead of backslashes, e.g. C:/MyDocu~1/TxcTest/JustAT~1

Placeholders referring to current file

The following placeholders are used to reference the current file. The current file is the file opened in the editor, i.e it has the input focus. If no file is open in the editor the placeholders will not be replaced.

The examples show how the placeholder will be replaced, if the current file is C:\My Documents\TxcTest \SubDir\AnotherTest.tex and the current project's main file is C:\My Documents\TxcTest\JustATest.tex.

%pc Will be replaced by the full path of the current file, e.g. C:\My Documents\TxcTest\SubDir\AnotherTest.tex

%wc Will be replaced by the relative path of the current file, e.g. SubDir\AnotherTest.tex

%dc Will be replaced by the directory of the current file, e.g. C:\My Documents\TxcTest\SubDir

%nc Will be replaced by the name of the current file. The name includes the file extension, e.g. AnotherTest.tex

%tc Will be replaced by the title of the current file. The title does not include the file extension, e.g. AnotherTest

%ec Will be replaced by the extension of the current file, e.g. tex

%bc Will be replaced by the base of the current file. The base includes the directory followed by the file's title without the file extension, e.g. C:\My Documents\TxcTest\SubDir\AnotherTest

Placeholders with slashes instead of backslashes

%Pc Same as %pc, but using slashes instead of backslashes, e.g. C:/My Documents/TxcTest/SubDir/AnotherTest.tex

%Dc Same as %dc, but using slashes instead of backslashes, e.g. C:/My Documents/TxcTest/SubDir

%Bc Same as %bc, but using slashes instead of backslashes, e.g. C:/My Documents/TxcTest/SubDir/AnotherTest

Placeholders for 8.3 path notation

%spc Same as %pc, but using the 8.3 path notation, e.g. C:\MyDocu~1\TxcTest\SubDir\Anothe~1.tex

%sdc Same as %dc, but using the 8.3 path notation, e.g. C:\MyDocu~1\TxcTest\SubDir

%snc Same as %nc, but using the 8.3 path notation, e.g. Anothe~1.tex

%stc Same as %tc, but using the 8.3 path notation, e.g. Anothe~1

%sec Same as %ec, but using the 8.3 path notation, e.g. tex

%sbc Same as %bc, but using the 8.3 path notation, e.g. C:\MyDocu~1\TxcTest\SubDir\Anothe~1

Placeholders for 8.3 path notation with slashes instead of backslashes

%sPc Same as %spc, but using slashes instead of backslashes, e.g. C:/MyDocu~1/TxcTest/SubDir/Anothe~1.tex

%sDc Same as %sdc, but using slashes instead of backslashes, e.g. C:/MyDocu~1/TxcTest/SubDir

%sBc Same as %sbc, but using slashes instead of backslashes, e.g. C:/MyDocu~1/TxcTest/SubDir/Anothe~1

Placeholders referrening to a selection in the current file

%l Will be replaced with the line number, the cursor is placed in this line in the current file. The first line has the number 1.

%s Will be replaced with the current selection in the current file. If nothing has been selected this placeholder will be replaced by the word the cursor is currently placed on.

Other placeholders

%% Will be replaced by the string %.
$$ Will be replaced by the string $.

Placeholders for sets of files

Placeholders can be used for handling sets of files.
Note These placeholders will never generate duplicates of a filename.

$[q][s][f][r]<FILESET>

$	Starts the placeholder. Use $$ to get $.
q	All filenames will be separately quoted using ".
s	All filenames will be issued in 8.3-format.
f	The forward slash / is used as directory separator.
r	The filenames will be given relative to the working directory of the project.

<FILESET> One of the following:

TPF	All TeX-files of the project.
BPF	All BibTeX-files of the project.
GPF	All Graphic-files of the project.
TXC	All files generated by TeXnicCenter regarding the project. Currently only the .tcp, .tps and .tiw files.
APF	All project files. This is the sum of TPF, BPF, GPF and TXC.
COF	All currently opened files in the editor.
AFS	All above filesets together. This is the sum of TPF, BPF, GPF, TXC and COF.

Examples

$qTPF Lists all (La)TeX-files reported by the structure parser of TeXnicCenter.
File names in quotes and separated by a space, like:
"D:\Temp\test\curve3d.tex" "D:\Temp\test\definitions\macros.tex" "D:\Temp\test\chaptertwo.tex"

$fBPF Lists all BibTeX-files reported by the structure parser of TeXnicCenter.
The forward slash is used as directory separator. File names separated by a space, like:
D:/Temp/test/xbib.bib D:/Temp/test/morebibs/morexbib.bib

$COF Lists all files, which are currently opened in the editor.
File names separated by a space (no quotes!), like:
D:\Temp\test\curvature3d.tex D:\Program Files\texmf\pdftex\latex\config\pdflatex.ini

$qsrAPF Lists all files of the project as reported by the structure parser of TeXnicCenter.
File names displayed in 8.3-format, path relative to the working directory,
file names separated by a space, like: "curvat~1.tcp" "curvat~1.tps" "curvat~1.tex" "xbib.bib" "morebibs\morexb~1.bib" "defini~1\macros.tex" "chapte~1.tex"

Application example

A good idea to use placeholders is a tool like the one defined below. This tool will build a ZIP archive of all files of the current project. A compression program (like WinZip or WinRAR) is required. Adjust path and arguments for that program.

- Command: zip.exe
- Arguments: a "%tm.zip" $qrAPF
- Initial Directory: %dm