Document Processing Flow Using Pandoc and TeX

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# Set up the Pandoc+TeX environment

## For Mac OS X

*Firstly*, please install [pandoc](http://johnmacfarlane.net/pandoc/) package from [Homebrew](http://brew.sh). If you haven't installed brew on your Mac, please give it a try.

$ brew install pandoc

Standalone pandoc package is available on <https://github.com/jgm/pandoc/releases>.

*Secondaly*, install [MacTeX](https://www.tug.org/mactex/) via [Homebrew Cask](http://caskroom.io). Yes, cask is highly recommended for Mac users too. Please be patient as it takes time to download the 2.3GB installation file.

$ brew cask install mactex

Don't forget to add texbin into $PATH:

$ echo 'export PATH=$PATH:/usr/texbin' >> ~/.bash\_profile

Standalone MacTeX package is available on <https://www.tug.org/mactex/>.

*After that*, install the necessary fonts by double click the font files. Font files "TeX Gyre Termes" can be retrieved from <http://www.gust.org.pl/projects/e-foundry/tex-gyre/termes>. Please make sure you have authorized files for the Adobe Chinese fonts: AdobStongStd, AdobHeitiStd, AdobeFangsongStdand AdobKaitiStd.

*Finally*, install zhfonts module for the ConTeXt engine.

$ cd ~/Library/  
$ mkdir -p texmf/tex/context/third  
$ cd !$  
$ git clone https://github.com/liyanrui/zhfonts.git  
$ luatools --generate  
$ mtxrun --script fonts --reload  
$ mtxrun --script fonts --list --pattern=\\* --all

Now you should be able to build the HPC sample documents.

## For GNU/Linux

*Firstly*, please download TexLive 2014 installer from <http://mirror.ctan.org/systems/texlive/tlnet/install-tl-unx.tar.gz>.

*Secondly*, run the installer. TeXLive can be installed into your $HOME, or into a global directory like /usr/local which requires root privilege.

$ cd /your/download/directory  
$ sudo ./install-tl   
 [... messages omitted ...]  
 Enter command: i  
 [... when done, see below for post-install ...]

When you see Welcome to TeX Live!, congratulations, you have successfully installed texlive2014. The following environment variables need to be added into ~/.bash\_profile:

# ~/.bash\_profile  
export PATH=/usr/local/texlive/2014/bin/x86\_64-linux:$PATH

If you need user manual, add the followings too:

# ~/.bash\_profile  
export MANPATH=/usr/local/texlive/2014/texmf-dist/doc/man:$MANPATH   
export INFOPATH=/usr/local/texlive/2014/texmf-dist/doc/info:$INFOPATH

In order to build the documents with Chinese characters, you need to add the four Adobe Chinese fonts:

$ mkdir -p ~/texmf/fonts   
$ cp YOUR\_FONTS.TTF\_OTF ~/texmf/fonts

*After that*, please install Pandoc from package manager.

$ sudo apt-get install pandoc  
$ mtxrun --script fonts --reload

Standalone pandoc package is available on <https://github.com/jgm/pandoc/releases>.

*Then* install the zhfonts module for ConTeXt:

$ mkdir -p ~/texmf/tex/context/third   
$ cd ~/texmf/tex/context/third   
$ git clone https://github.com/liyanrui/zhfonts.git  
$ luatools --generate

*Now*, we can generate wiki and pdf file using Texlive and pandoc.

## For Microsoft Windows

At the very beginning, Windows users are required to install [Cygwin](https://cygwin.com/) to make the Linux tools take effect. Pleas check the following tools during installation:

* Base:sed
* Devel: make
* Base: openssl
* Net: openssl
* Devel: git, git-completion.
* Editors: vim, vim-common

After installation, a shortcut of Cygwin will be added on your Desktop.

*Firstly*, install [pandoc](http://johnmacfarlane.net/pandoc) from its binary release on <https://github.com/jgm/pandoc/releases>.

*Secondly*, install [TeXLive](https://www.tug.org/texlive/) 2014 by running install-tl-windows.bat in the ISO image. Commands of Tex Live will be automatically added to your PATH.

Then install extra fonts required by the HPC template. Download fonts AdobStongStd, AdobHeitiStd, AdobeFangsongStdand AdobKaitiStd, then copy them into X:\Windows\Fonts.

*After that*, install zhfonts for the context engine.

1. Get zhfonts from its [github page](https://github.com/liyanrui/zhfonts).
2. Copy the folder zhfonts into texlive\2014\texmf-dist\tex\context\third.
3. Make zhfonts to take effect, then reload the font cache. The following commands should be typed in Cygwin window:

* luatools --generate  
  mtxrun --script fonts --reload

Open Cygwin and now you should be able to use git and build the HPC sample documents.

# Build the sample document sample.mkd

The document processing flow depends on some style files. It is recommended to clone the whole hpc-public-docs project:

$ git clone https://github.com/sjtuhpcc/hpc-public-docs.git

Then compile sample.mkd into PDF, wiki, Micosoft Docx formats. Generated files can be found in pdf, wiki, and docx separately.

$ make sample.pdf sample.wiki sample.docx

# Reference

* "gist: Configure ConTeXt environment after installing TeX" <https://gist.github.com/weijianwen/4a3794946982f4cc0b31>
* "TeXLive on Windows" <https://www.tug.org/texlive/windows.html>
* "zhfonts模块的用法" <http://garfileo.is-programmer.com/posts/23740>