Document Processing Flow Using Pandoc and TeX

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Dec 31th, 2014

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1 Setup the workflow on Mac OS X

Firstly, please install **pandoc** package from **Homebrew**. 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** via **Homebrew Cask**. 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.

2 Setup the workflow on 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.

```
$ cd /your/download/directory
$ ./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 texlive 2014. Now modify the environment variable PATH as follow:

```
$ export PATH=/usr/local/texlive/2014/bin/x86_64-linux:$PATH
```

If you need mannual, please type:

```
export MANPATH=/usr/local/texlive/2014/texmf-dist/doc/man:$MANPATH
export INFOPATH=/usr/local/texlive/2014/texmf-dist/doc/info:$INFOPATH
```

After that, please install Pandoc from package manager.

```
$ sudo apt-get install pandoc
```

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

Finally, please download the latest version of zhfont from https://github.com/liyanrui/zhfonts, then replace the original files with it:

```
$ cp t-* /YOUR/INSTALL/PATH/texlive/2014/texmf-dist/doc/context/third/context-notes-zh-cn/src/
```

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

For building steps, please refer to the Makefile in hpc-maintenance-docs repo http://git.hpc.sjtu.edu.cn/docs/hpc-maintenance-docs/blob/master/Makefile.

3 Setup the workflow on Windows

At the very beginning, Windows users are required to install **Cygwin** to make the Linux tools take effect. Pleas check the following tools during installation:

Base:sed

Devel: makeBase: 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 from its binary release on https://github.com/jgm/pandoc/releases.

Secondly, install **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 YOUR_SYSTEM_PARTITION:\windows\fonts.

After that, install zhfonts for the context engine.

- 1. Get zhfonts from its github page.
- 2. Copy the folder zhfonts into texlive $\2014\$ texmf-dist $\$ context $\$ third.
- 3. Run luatools --generate to make zhfonts take effect, run mtxrun --script fonts --reload to reload the fonts.

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

4 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