MacT_EX-2015 and El Capitan

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1 Introduction

Under OS X 10.11, El Capitan, writing to /usr is no longer allowed[1], even with Administrator privileges. The usual symbolic link to the active TeX Distribution, /usr/texbin, is therefore removed (if it was there from a previous OS version) and cannot be installed. Many GUI applications have the path to those binaries set to /usr/texbin by default and will no longer find the binaries there.

When you install MacT_EX-2015 it not only creates /usr/texbin, if allowed for the present OS version, but also creates a second symbolic link, /Library/TeX/texbin, in /Library/TeX which is "owned" by MacT_EX so is allowed by El Capitan. Your GUI applications will need to be updated so they can again "find" the active TeX Distribution's programs.

This guide gives you instructions for "fixing" the GUI applications that come as part of the MacT_EX-2015 installation. I'll add other applications as folks pass on the information.

2 Terminal

When MacT_EX-2015 installs TeX Live 2015 it also adjusts the $PATH variable to use /Library/TeX/texbin rather than /usr/texbin so there is nothing to change!

3 T_EXShop

Version 3.52 of T_EXShop, released on July 13, 2015, automatically configures the default setting to the value needed. (It is hoped that other applications will adopt this policy in the future.)

Previous versions of T_EXShop require only a single change in the TeXShop → Preferences Engine tab. Change the Path settings for (pdf)TeX from /usr/texbin to /Library/TeX/texbin as shown in Figure (1).
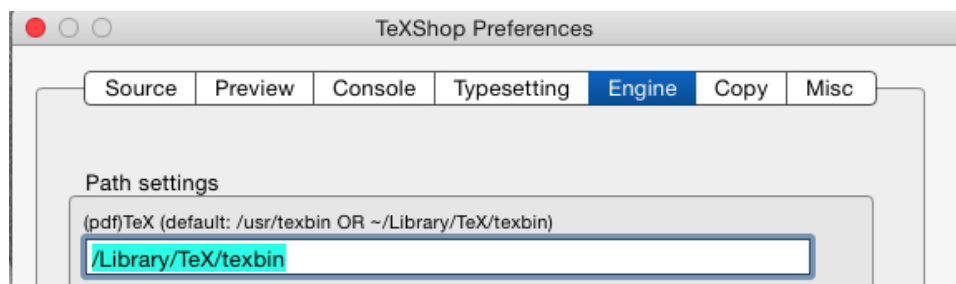

Figure 1: The Engine tab in T_EXShop Preferences

4 L^AT_EXit

L^AT_EXit requires a more extensive change to it's LaTeXiT → Preferences than T_EXShop. Shown in Figure (2) is the Typesetting tab of LaTeXiT → Preferences with the pdflatex radio button selected.

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[1]although writing to /usr/local is allowed.

This allows you to change the path to the `pdflatex` command from `/usr/texbin/pdflatex` to `/Library/TeX/texbin/pdflatex` as shown. You need to then select the xelatex radio button to change the path to the `xelatex` command from `/usr/texbin/xelatex` to `/Library/TeX/texbin/xelatex`. Finally select the the latex + dvipdf button to change the path to the `latex` command.
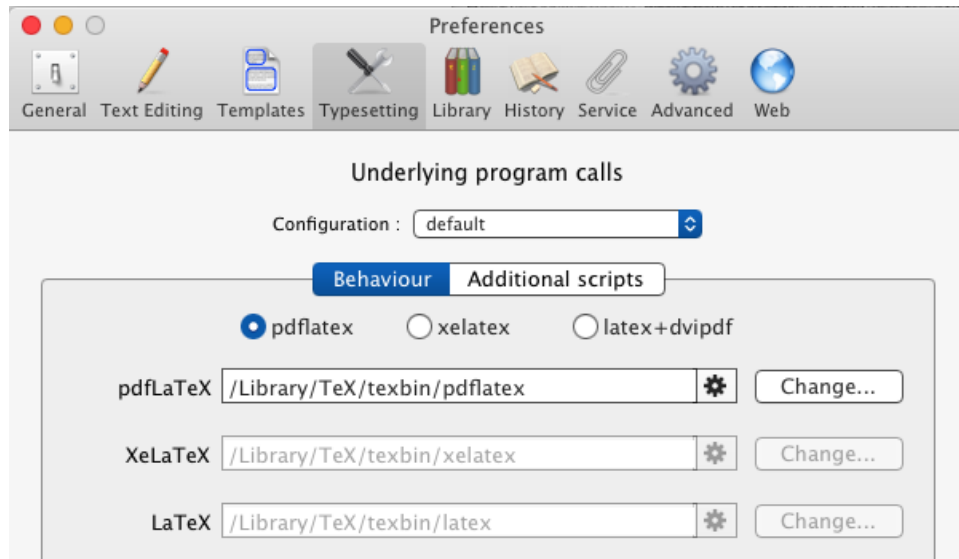

Figure 2: The Typesetting tab in LATEXit Preferences

5 BibDesk

If you use the Preview option for BibDesk you'll need to change two items, Full path to pdflatex: and Full path to bibtex:, in the TeX Preview tab in BibDesk → Preferences as seen in Figure (3).
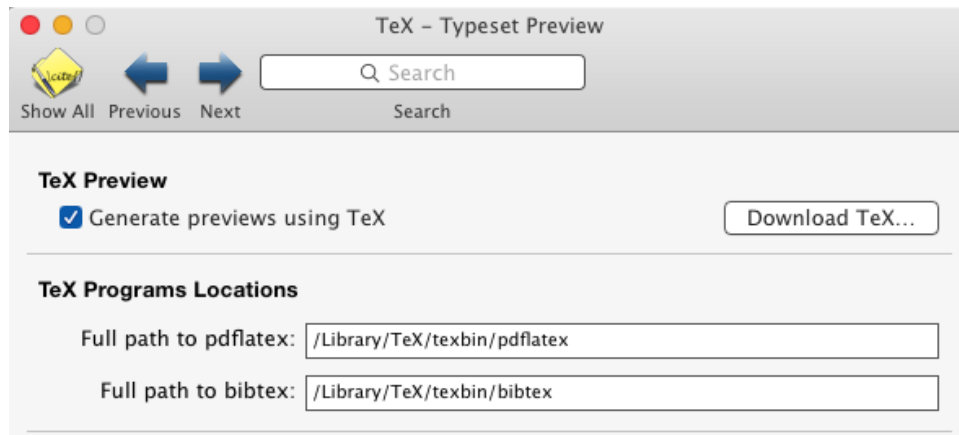

Figure 3: The TeX Preview tab in BibDesk Preferences

6 TEX Live Utility

Open TEX Live Utility Preferences and click on the Choose. . . button as in Figure (4). That opens a file chooser. Type Shift-Cmd-G, enter `/Library/TeX` into the dialog box as shown in Figure (5) and then press Return. Finally Double-Click on `texbin`.
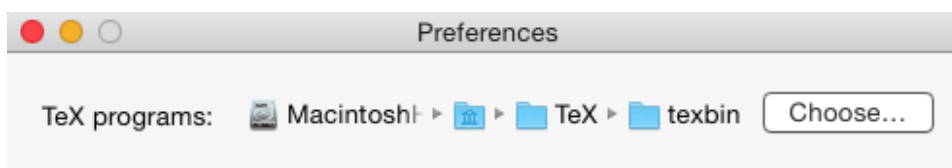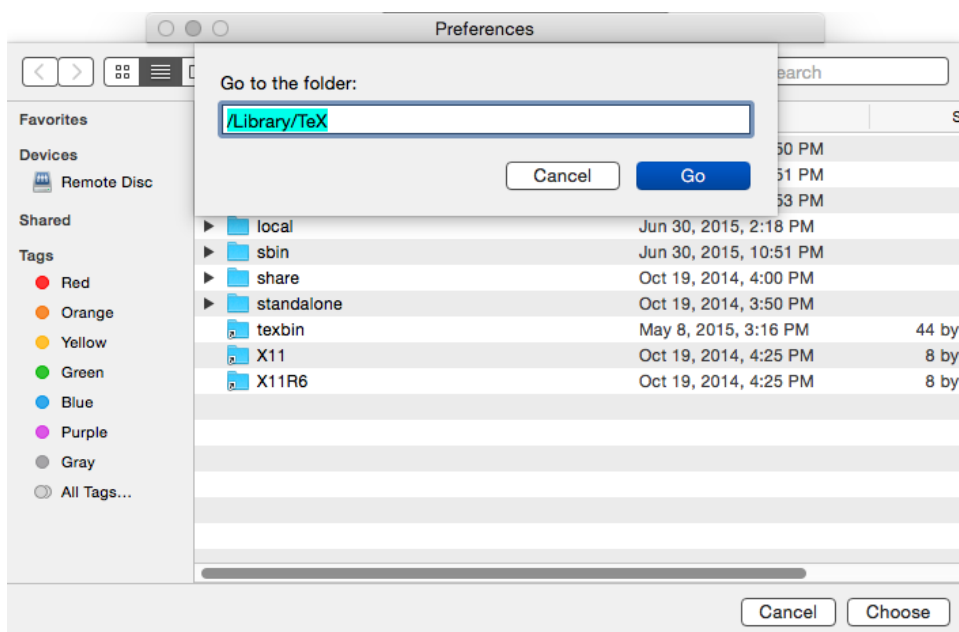
Figure 4: TEX Live Utility Preferences

Figure 5: The TEX Live Utility Preferences File Chooser showing the Go to folder drop down.

7 Other Applications

It seems to me that Aquamacs (and probably other "emaxen") as well as XQuartz (X-11) expand upon the $PATH value so seem to "auto-configure" to include /Library/TeX/texbin in their search path already. If I'm incorrect please let me know what has to be changed to fix them; they may be adding /Library/TeX/texbin to their $PATH variable but still retain /usr/texbin which does no harm but isn't quite correct. It is also known that the present version of XQuartz attempts to use /usr for symbolic links and will have to be updated to fix that; but that has nothing to do with our discussion.

Exactly what you have to do in other popular applications (e.g., TeXmaker, TeXstudio, etc.) depends upon the application. Please let me know and I'll add more information to this document.

7.1 Lyx

Tharnier Oliveira sent the following information about Lyx.

Go to the Paths item of Lyx → Preferences. Change the contents of the PATH prefix box from /usr/texbin to /Library/TeX/texbin; see Figure (6) on page 4. Then go to Tools → reconfigure and reset Lyx.

8 Don't have MacTEX-2015?

Pre-2015 versions of MacTEX don't install the /Library/TeX/texbin symbolic link and therefore are left "high and dry" when you install El Capitan unless you also install MacTEX-2015 or BasicTEX-2015.

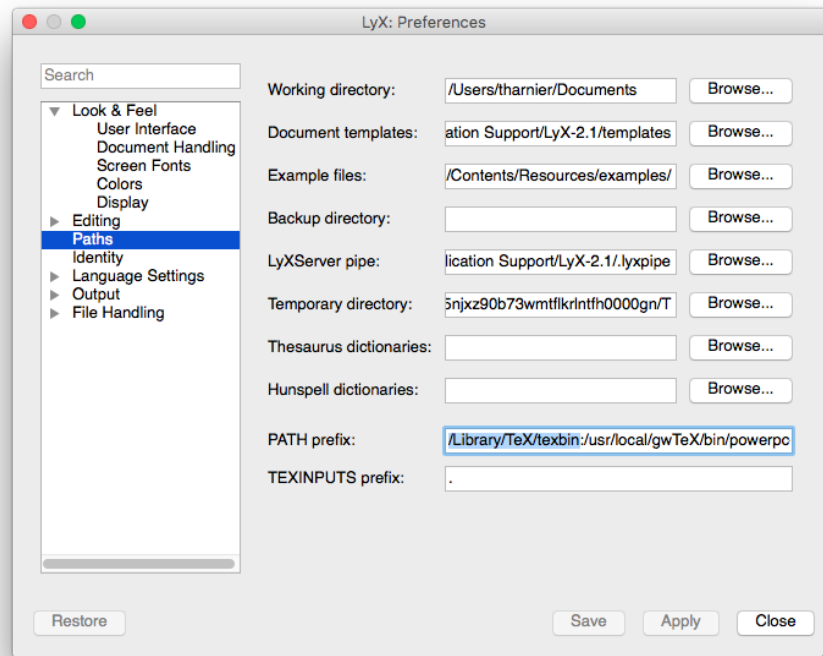However, if you decide not to install MacTEX-2015 you can still create the proper symbolic link

Figure 6: The Lyx → Preferences Paths item showing the PATHS prefix: that needs to be changed.

using the three commands

```
cd /Library/TeX
sudo ln -s Distributions/Programs/texbin texbin
echo "/Library/TeX/texbin" >~/Desktop/TeX
sudo cp ~/Desktop/TeX /etc/paths.d/TeX
```

(giving your Admin password when requested) in the Terminal application. You can then delete the TeX file on your Desktop. Note: it's advisable to copy and paste the commands to Terminal. Then make the changes to the GUI apps as noted above.