

TeX Local Install

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1 TeX Distributions Installed in Unusual Places

Some users prefer to install TeX Live in their home directory, with files owned by themselves rather than root. For instance, students at Universities often do not have Admin privileges and must install in their home directory.

A number of users want to install TeX Live on an external drive.

Currently MacTeX can only install TeX in `/usr/local/texlive`, but the TeX Live install script available from TUG can install TeX Live anywhere.. This script can be run as an ordinary user without root privileges, installing files owned by that user to one of the user's locations. The end result is entirely equivalent to the distribution installed by MacTeX.

A new Pref Pane can accommodate these users. A separate document explains how to install and use this Pref Pane.

2 Getting Started

Go to

<http://tug.org/texlive/acquire-netinstall.html>

and download *install-tl-unx.tar.gz* from a link at the top of this site. This is a small, 2.8 mb, download. Double click it to uncompressed to a small folder named *install-tl-20140226*; your date in this name will be different. The folder contains a script named *install-tl* which will ask a few configuration questions, and then download TeX Live from the internet and install it at a desired spot.

3 Selecting an Installation Location

It is useful to compare what you are about to do with what MacTeX does. MacTeX installs TeX as root by calling the installation script via `sudo ./install-tl`. You will run the installation script without the sudo, calling `./install-tl` to install files owned by you.

MacTeX accepts default answers to most configuration questions in the script and in particular installs to the default location `/usr/local/texlive/2014`, where the last item changes from year to year.

The install script puts about 18 files and folders in the final folder, in this case 2014. If you choose to install in a folder which already exists and is already populated, you'll be sorry because these 18 items will then be scattered throughout your folder. So the last item in the path should be a new folder to be created by the script. We recommend installing in `some-local-folder/texlive/2014` rather than `some-local-folder` or `some-local-folder/2014`.

4 Installing TeX Live

To install, open Terminal in `/Applications/Utilities`. Assuming the `install-tl-20140226` folder is on the desktop, type

```
cd ~/Desktop/install-tl-20140226
./install-tl
```

The script may notice that you already have a TeX Live installation. In that case, it will ask if it should use the defaults assumed by that application. Answer no. Then a series of configuration questions will appear. Each section will start with a capitol letter.

Section “B” asks which binaries should be installed. The script will have determined the appropriate binary for your platform, so ignore this stage.

Section “S” asks for an install scheme. The default, “scheme-full”, installs everything and corresponds to the TeX Live installed by MacTeX. The “small scheme” corresponds to the distribution installed by BasicTeX. Use other schemes at your own risk.

Section “C” can be ignored.

Section “D” selects installation location. Choice “1” selects the actual location of the TeX distribution. Reasonable choices might be

```
~/texlive/2014
~/TeX/texlive/2014
```

An external disk would probably have path similar to

```
"/Volumes/Macintosh HD 2/texlive/2014"
```

where the quotation marks indicate that one of the names contains spaces.

Once the install location is chosen, other suggested defaults in “D” will change. In particular, “2” will change to `existing-local-path/texlive/2014/texmf-local`, inside the actual distribution. This choice is OK, but we recommend changing it to `texisting-local-path/texlive/texmf-local`.

Several items under “D” can remain as is, but “5”, “6”, and “7” should be changed to conform to MacTeX conventions. These three items should become

```
~/Library/texlive/2014/texmf-var
~/Library/texlive/2014/texmf-config
~/Library/texmf}
```

In general, MacTeX replaces invisible items with visible items inside the user’s Library folder.

In the items under “O”, select letter size in the US and A4 size at most other places in the world. Accept “allow execution of restricted list” and “create all format files” and uncheck the two remaining items.

Leave “V” alone. Push “I” to start and eventually conclude installation. Ignore the messages printed at the end of installation.