

TUG-TEXLIVE-2019

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1. TeXLive-2019

This is the portion of the TUG documentation which deals with making the TeXLive-2019 and TeXLive-2019-DVD packages. This is the key component of the build directory.

A clean package file will contain

- Files “buildPackage.sh”
- Folder named “TLprofiles”. This directory will eventually contain two files, “texlive.profile” and “texlivea4.profile”
- “TUG” folder with this document

2. CREATING THE PACKAGE

The compile system must contain X11. Get it at X11Quartz if it isn't there.

On the compile system, issue the commands

```
cd /usr/local
sudo mv texlive texlive-old
```

Then make sure local configuration files for TeX Live are disabled, perhaps by writing

```
cd
cd Library
mv texmf texmfold
rm -R texlive
```

Then create a folder containing the tlpptest, which will later be updated with the same command. To do that, make a directory named texlive2019pretest and then

```
cd
cd texlive2019pretest
rsync -a --delete --exclude="mactex*" ftp.math.utah.edu::tlptest .
```

The last line here obtains a copy from the utah mirror site for pretest releases. If time is of the essence, but not otherwise, download directly from the tug home site:

```
cd
cd texlive2019pretest
rsync -a --delete --exclude="mactex*" ftp.tug.org::tlpretext .
```

When first building binaries, it is necessary to submit them to Karl, wait for him to install them in the pretest and wait overnight for the pretest to make its way to mirror sites.

Then install TeX Live from the svn directory by

```
TEXLIVE_INSTALL_NO_CONTEXT_CACHE=1
export TEXLIVE_INSTALL_NO_CONTEXT_CACHE
cd
cd texlive2019pretest
sudo env TEXLIVE_INSTALL_NO_CONTEXT_CACHE=$TEXLIVE_INSTALL_NO_CONTEXT_CACHE ./instal
```

The install script will present a short menu of configuration options. Modify defaults as follows:

- Make sure the x86_64-darwin binaries are selected.
- Use the “D” option to change some directories:
 - Use the “5”, TEXMFVAR, option to select


```
~/Library/texlive/2019/texmf-var
```
 - Use the “6”, TEXMFCONFIG, option to select


```
~/Library/texlive/2019/texmf-config
```
 - Use the “7”, TEXMFHOME, option to select


```
~/Library/texmf
```
- Use the “O” option to select “use letter size instead of A4 by default”

Then start installation.

When installation is complete, switch the default tlmgr repository to the final value using the command

```
sudo /usr/local/texlive/2019/bin/x86_64-darwin/tlmgr option repository \
http://mirror.ctan.org/systems/texlive/tlnet
```

When installation is complete, go to

```
/usr/local/texlive/2019/tlpkg
```

and copy the file `texlive.profile` to the `TLprofiles` folder, replacing the current copy of `texlive.profile` there.

In addition, duplicate `texlive.profile` in the `TLprofiles` directory, calling the new copy `texlivea4.profile`. Then edit this new file, changing “option_letter 1” to “option_letter 0” near the end of the file. These `TLprofiles` also go to the directory `MacTeX-for-DVD` and ultimately to the install folder in DVD.

After these steps, the final TeXLive directory “root” can be built, using the command:

```
sudo sh buildPackage.sh
```

Finally repair `/usr/local` by

```
cd
cd /usr/local
sudo rm -R texlive
sudo mv texlive-temp texlive
```

This root file is all that is needed to make MacTeX.