

TUG-TEXLIVE-2016

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1. TEXLIVE-2016

This is the portion of the TUG documentation which deals with making the TeXLive-2016 and TeXLive-2016-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

On systems before El Capitan, issue the commands

```
cd /usr
sudo mv local local-temp
```

On El Capitan and later, 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 texlive2016pretest and then

```
cd
cd texlive2016pretest
rsync -a --delete --exclude="mactex*" ftp.math.utah.edu::texlive/tlpretest .
```

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 texlive2016pretest
rsync -a --delete --exclude="mactex*" ftp.tug.org::texlive/tlpretest .
```

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 texlive2016pretest/tlpretest
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:

- Use the “B” option to select both universal-darwin and x86_64-darwin binaries.
- Use the “D” option to change some directories:
 - Use the “5”, TEXMFVAR, option to select


```
~/Library/texlive/2016/texmf-var
```
 - Use the “6”, TEXMFCONFIG, option to select


```
~/Library/texlive/2016/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 (assuming that the TeXLive-2016 install package is made on an Intel system)

```
sudo /usr/local/texlive/2016/bin/universal-darwin/tlmgr option repository \
http://mirror.ctan.org/systems/texlive/tlnet
```

When installation is complete, go to

```
/usr/local/texlive/2016/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 on systems older than El Capitan by

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

and repair /usr on El Capitan and above by

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

This root file is all needed to make MacTeX.