

TUG-LATIN-MODERN-FONTS

RICHARD KOCH

1. LATIN MODERN FONTS

This is the portion of the TUG documentation which deals with making the Latin Modern Fonts package.

Warning: It is important that the folders in which packages are built live on the hard disk rather than an external disk. Building constructs folders named “root” which are copies of material to be installed. This root folder and its contents are often owned by root. But material on an external drive is owned by the user instead.

A clean package file will contain

- The files “buildPackage.sh” and “signPackage.sh”
- The files background.jpg, License.rtf, ReadMe.rtf, and Welcome.rtf.
- “root” folder with a tree leading to the folder named “Latin-Modern”
- “LatinModernFontsBuild”, the PackageMaker project which builds the optional Latin-Modern-Fonts install package
- “TUG” folder with this document
- “OldStyle” folder with script “buildOldPackage” and files Description.plist, Info.plist, and folder “resources” with standard stuff.

This is one of the easiest packages to maintain. It is unique in that its name does not change from year to year, since if there are new versions of the Latin Modern Fonts, we want to replace the old versions with the new versions. To update the package for a new year, it is not necessary to edit “buildPackage.sh”, and only “Welcome.rtf” needs editing because it shows the release date.

Unlike most packages, the root folder is not constructed by copying an actual installation on the Mac. Instead, it is a permanent part of the build system, which buildPackage.sh assumes already exists.

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To construct the package, find the latest version of the Latin Modern Fonts in `/usr/local/texlive/2013/texmf-dist/fonts/opentype/public/lm`. Copy the contents to the build system at `root/Library/Fonts/Latin Modern/`. Then

```
sudo sh buildPackage.sh
```

This step will make sure permissions are correct in `/root`, but will not build an install package. Building an install package is optional, since the install packages which contain Latin Modern Fonts use only the `/root` folder.

2. MAKING AN INSTALL PACKAGE

If an install package is desired, build it using `LatinModernFontsBuild`. Mountain Lion requires that packages be signed. Signing is achieved by selecting a certificate. My certificate for install packages is “Developer ID Installer: Richard Koch”, but others will use another certificate. See the master TUG documentation for the entire MacTeX-2012 Build System for an explanation of how to obtain a developer signature.

Edit this project file using the GUI interface of `PackageBuilder` as follows:

- (1) Click the top item on the left. The right side will change to a view with three tabs. First select the Configuration tab. Edit so
 - (a) Title: “Latin-Modern-Fonts”
 - (b) User Sees: Easy Install Only
 - (c) Install Destination: System volume
 - (d) Certificate: Leave this blank. You might think that putting a certificate name here would correctly sign the package, but experiments show that it does not. The package needs to be signed after it is constructed.
 - (e) Description: Empty
- (2) The Requirements and Actions tab entries for the top item can be left blank
- (3) Click the entry in the Contents section on the left. The right side will change to a view with two tabs. Select the Configuration tab. Edit so
 - (a) Choice Name: Latin-Modern-Fonts
 - (b) Identifier: choice1
 - (c) Initial State: Selected and Enabled
 - (d) Destination: Leave Blank
 - (e) Tooltip: Leave Blank
 - (f) Description: Leave Blank

- (4) The Requirements tab entries for this contents item can be left blank
- (5) Open the Latin Modern Fonts entry in the left column. This item should show a “Fonts” directory, obtained by dragging root/Library/Fonts to the left column. The right side will change to a view with four tabs. Items under the Components and Scripts tabs can be left blank. It is not necessary to edit the items under the Contents tab. The items under the Configuration tab should be edited as follows:
 - (a) Install: root/Library/Fonts (The item on the right should have selected “Relative To Project”)
 - (b) Destination: /Library/Fonts (The item on the right should have selected “Relative To Project”)
 - (c) Do not check “Allow custom location”
 - (d) Patch: No patch root selected
 - (e) Package Identifier: org.tug.mactex.latin-modern
 - (f) Package Version: 1.0
 - (g) Restart Action: None
 - (h) Check “Require admin authentication”
 - (i) PackageLocation: Self-Contained

After verifying all these items, build the install package by clicking the “Build” icon. When asked to select a name, choose “Latin-Modern-Fonts-Temp.pkg”. After the package has been made, sign it by executing the following line in Terminal:

```
sh signPackage.sh
```

This script simply calls

```
productsign --sign "Developer ID Installer: Richard Koch" old-name new-name
```

where “old-name” is Latin-Modern-Fonts-Temp.pkg and “new-name” is Latin-Modern-Fonts.pkg.

3. BUILDING AN OLD STYLE PACKAGE

To do this, change to the “OldStyle” directory and issue the command

```
sudo sh buildOldPackage.sh
```