

TUG-MACTEX-2019

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1. MACTEX

This is the portion of the TUG documentation which deals with making the MacTeX-2019 package.

2. CONTENTS

This is the final product of the build directory, built for internet distribution.

A clean package file will contain

- Files “buildPackage.sh” and “signPackage.sh”
- Files “background.jpg”, “License.rtf”, “ReadMe.rtf”, and “Welcome.rtf”
- scripts_ghostscript folder, containing files “postinstall”
- scripts_gui folder, containing file “postinstall”
- scripts_telive folder, containing files “Description.rtf”, “postinstall”, “texdist”, “TeXDist-description.rtf”, “TeXDistVersion”, “TeXManPath”, and “TeXPath”
- The MacTeXMaker project file for PackageMaker
- “TUG” folder with this document

This package is easy to maintain. To update the package for a new year, edit the three rtf files, changing the package name to reflect the new date and release date.

3. BUILDING TeXLive-2019 WITH PACKAGEMAKER

The package contains two copies of the Packagemaker Template, MacTeXMaker and MacTeXMaker copy. The second is the primary backup of the first and most important source of information about it. The material below just provides extra backup.

Edit MacTeXMaker, the Packagemaker project file, using the GUI interface, 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: MacTeX-2019
 - (b) User Sees: Easy and Custom Intall
 - (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

Click the entry TeXLive-2019 in the Contents section on the left. The right side will change to a view with two tabs.

- (1) Select the Configuration tab. Edit so
 - (a) Choice Name: TeXLive-2019
 - (b) Identifier: choice1
 - (c) Initial State: Selected and Enabled
 - (d) Destination: /
 - (e) Tooltip: Leave Blank
 - (f) Description: Leave Blank
- (2) The Requirements tab entries for this contents item can be left blank
- (3) Open the TeXLive-2019 entry in the bottom left column. This item should show an “texlive” directory, obtained by dragging ../TeXLive-2019/root/usr/local to the left column. The right side will change to a view with four tabs. It is not necessary to edit the items under the Contents or Components tabs. The items under the Configuration tab should be edited as follows:
 - (a) Install: ../TeXLive-2019/root/usr/local (The item on the right should have selected “Relative To Project”)

- (b) Destination: /usr/local (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.texlive2019
- (f) Package Version: 1.0
- (g) Restart Action: None
- (h) Check “Require admin authentication”
- (i) PackageLocation: Self-Contained

The items under the Scripts tab should be edited to read

- (a) Scripts directory: scripts_texlive (The item on the right should have selected “Relative To Project”)
- (b) Preinstall: Leave Blank
- (c) Postinstall: scripts_texlive/postinstall (The item on the right should have selected “Relative To Project”)

Click the entry GUI-Applications in the Contents section on the left. The right side will change to a view with two tabs.

- (1) Select the Configuration tab. Edit so
 - (a) Choice Name: GUI-Applications
 - (b) Identifier: choice2
 - (c) Initial State: Selected and Enabled
 - (d) Destination: /
 - (e) Tooltip: Leave Blank
 - (f) Description: Leave Blank
- (2) The Requirements tab entries for this contents item can be left blank
- (3) Open the GUI-Applications entry in the bottom left column. Add an “Applications” directory to this item by dragging ../GUI-Applications/root/Applications to the left column. The right side will change to a view with four tabs. It is not necessary to edit the items under the Contents tab. But it is *very important* to edit the items under the Components tab, turning off all boxes labeled “Allow Relocation.” The items under the Configuration tab should be edited as follows:

- (a) Install: ../GUI-Applications/root/Applications (The item on the right should have selected “Relative To Project”)
- (b) Destination: /Applications (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.gui2019
- (f) Package Version: 1.0
- (g) Restart Action: None
- (h) Check “Require admin authentication”
- (i) PackageLocation: Self-Contained

The items under the Scripts tab should be edited to read

- (a) Scripts directory: scripts_gui (The item on the right should have selected “Relative To Project”)
- (b) Preinstall: Leave Blank
- (c) Postinstall: scripts_gui/postinstall (The item on the right should have selected “Relative To Project”)

Click the entry Ghostscript-9.26 in the Contents section on the left. The right side will change to a view with two tabs.

- (1) Select the Configuration tab. Edit so
 - (a) Choice Name: Ghostscript-9.26
 - (b) Identifier: choice3
 - (c) Initial State: Selected and Enabled
 - (d) Destination: /
 - (e) Tooltip: Leave Blank
 - (f) Description: Leave Blank
- (2) The Requirements tab entries for this contents item can be left blank
- (3) Open the Ghostscript-9.26 entry in the bottom left column. This item should show a “local” directory, obtained by dragging ../Ghostscript-9.26/root/usr/local to the left column. The right side will change to a view with four tabs. It is not necessary to edit the items under the Contents or Components tabs. The items under the Configuration tab should be edited as follows:

- (a) Install: ../Ghostscript-9.26/root/usr/local (The item on the right should have selected “Relative To Project”)
- (b) Destination: /usr/local (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.ghostscript9.26
- (f) Package Version: 1.0
- (g) Restart Action: None
- (h) Check “Require admin authentication”
- (i) PackageLocation: Self-Contained

The items under the Scripts tab should be edited to read

- (a) Scripts directory: scripts_ghostscript (The item on the right should have selected “Relative To Project”)
- (b) Preinstall: Leave Blank
- (c) Postinstall: scripts_ghostscript/postinstall (The item on the right should have selected “Relative To Project”)

4. BUILDING

After verifying all these items, build the install package by clicking the “Build” icon. When asked to select a name, choose “MacTeX-2019-Temp”.

5. SIGNING

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 MacTeX-2019-Temp.pkg and “new-name” is MacTeX-2019.pkg.