

# TUG-MACTEX-2013-DVD

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## 1. MACTEX-DVD

This is the portion of the TUG documentation which deals with making the MacTeX-2013-DVD package.

In 2012, we built with the new PackageMaker. This was a disaster. Both old and new PackageMakers permit preinstall scripts which determine whether conditions are suitable for installation. But in the new PackageMaker, this script cannot report errors to the user, so installation fails for unknown reasons.

Unfortunately, there is one common error users make when using the DVD. They copy the install package to their hard disk, eject the DVD, and then try to install. Since TeX Live is contained elsewhere on the DVD, installation fails.

The new PackageMaker had an alternate way to test conditions, and that method can report problems to the user. It has a series of built-in java calls for testing aspects of the system. We used such a call to test that the DVD was mounted. Unfortunately, after the DVD was built and released, we discovered that java call to see if the DVD is mounted works on Snow Leopard and below, but always reports an unmounted disk on Lion and above.

The solution to this problem is to build our packages with the old PackageMaker, because DVD install packages do not need to be signed. Building with the old PackageMaker is easy because it uses the same deliverables as the new PackageMaker. So to get an old package, we only need to run one script.

Unfortunately, the old PackageMaker doesn't run on Lion or other recent operating systems. But the new PackageMaker has a compatibility mode in which it can run the same scripts used earlier to build old style packages.

Each of our build folders contains a subfolder named "OldStyle" with this script for the package. Thus it is easy to assemble six old style packages corresponding to the pieces of MacTeX-DVD.

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## 2. MAKING THE OLD STYLE LEGACY MACTEX-2013-DVD.MPKG

The final step is to combine these packages into a metapackage. The new PackageMaker has a compatibility mode to do this as well, as shown in its man page. But the man page lies. PackageMaker always aborts when trying to make an old style metapackage.

The solution to this problem is to use the third party program "Iceberg" to assemble the subpackages into a final metapackage. I first learned about this program at the Boston TUG conference in 2012. Thanks to the audience member who insisted on telling me about it, even after I told him I wasn't interested!

Stephane Sudre has written an open source version of the old PackageMaker called *Iceberg*. See

<http://s.sudre.free.fr/Software/Iceberg.html>

This software can combine the individual legacy packages and produce an mpkg output which looks to the user exactly like our previous install Package.

Making this final package is very easy. It is described in a separate document in this folder, "HowToMake."

There is again a slight catch. If the DVD is not mounted, the final package will mark TeXLive-2013 as unavailable in the "Custom Install" dialog, rather than reporting an error. A user trying a regular install will get everything *except* TeX Live.

The initial dialog reports his situation in large letters.