

# The Mesa 3-D graphics library

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*Ported to OpenStep by Pete French*

*Compiled for Rhapsody by Tomi Engel*

*Packaged as a framework by David Young*

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There are no significant changes to the functionality of Mesa in the OpenStep framework. Please refer to the Mesa home site at <http://www.ssec.wisc.edu/~brianp/Mesa.html> for general information.

## Rhapsody Information

This framework was built on Rhapsody Developer Release 1 on a PowerPC (8500 PowerMac)

The packages contains the **GL.framework** and the GL headers needed to do development. In addition it also includes Pete French's Mesa demonstration app.

Another Mesa based demo app is Tomi Engel's Osprey.app which is available on the archives as well.

## Installation

The framework installs in **/LocalLibrary/Frameworks**, so you should wind up with **/LocalLibrary/Frameworks/GL.framework**. My justification for this is that most GL code expects to `#include <GL/gl.h>`, and this becomes possible with this layout. Hopefully when **Rhapsody Premier** ships (or sometime thereafter) Apple will include real OpenGL support, with hardware acceleration, etc, and we won't need this.

But the Mesa solution is a very good starting point if you need to port OpenGL based applications to Rhapsody.

The other two packages may be installed anywhere.

## **Warnings and Cautions**

Some OpenGL code expects to include "glaux.h".

You'll need to change this to <GL/glaux.h>. Headers which would be a top level include (ie, <3d.h>) have been moved underneath the GL framework for this release, so the code change would be to <GL/3d.h>.

Warning on **gtk**, gtk is not finished. Under the Mesa distribution, it's coupled rather tightly with X. I will be developing an OPENSTEP aware version in the future.