

Rotato

by Henry Krempel, NeXT Developer Support
(based very much on Ali Ozer's original)

A simple `NXImage` rotation example.

This example is intended to illustrate the steps necessary in rotating an `NXImage`. A Custom View is shown that contains an `NXImage`. A slider at the bottom allows you to rotate the image to any of the four 90° rotations (in the interest of simplifying the sizing of the `NXImage`, only these rotations were done). A button allows you to flip the image over.

The class that does the interesting work is `MyImage`. This is a subclass of `NXImage` that does a number of interesting things:

- It keeps track of the size of the `NXImage`. When the image is rotated, the aspect ratio changes (width and height are exchanged).
- Overrides the `drawRepresentation:inRect:` method, where PostScript rotation can be applied before the image is rendered.

Why is this interesting?

You may well ask. `UIImages` are normally imaged into place using compositng operations (as is done in the "TestView" Custom View). Compositing does not pay attention to PostScript's current transformation matrix (ctm), so the rotate, scale, and translate operators have no effect. In Rotato, the image is rotated and rendered into an offscreen `UIImage` *before* it is composited.