Subject: Re: mpeg next question
Posted by Rick Towler on Tue, 01 Oct 2002 19:15:02 GMT
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"Reimar Bauer" <R.Bauer@fz-juelich.de> wrote

> I have 40 frames and I like to have played each at a frame rate one per
> second.
> I don't find a keyword to do this in mpeg.

You can't. Since MPEG was designed for video the frame rate is tied to
industry standards (PAL/NTSC). While some MPEG codecs may allow you encode
at non-standard rates, the resulting file will probably only be decoded by
the same codec. You lose your portability.

> At the moment I defined frame_rate=2 this is 24 frames/sec.
> And then I used a loop to replicate each frame 24 times.
> The mpeg file gets horrible big. I'am using 'IDLgrMPEG'

> Any bette ideas?

Don't use MPEG. Or I should say, don't use MPEG-1 or MPEG-2.

While it is probably the most portable video file format (MPEG-1 that is),
it just can't compete with newer codecs. Plus, MPEG wasn't designed with
scientific animations in mind and it produces terrible results unless the
quality settings are very high. Yes, probably *no* codec programmers were
thinking of the scientists but there are codecs that do sci animations
better.

To choose a codec, think of your audience. You will end up trading file
size and quality for codec availability. The best decoders are freely
available for PC and Mac. There are a few better one's available for Xanim.

In my experience, the best codecs for sci anim ("best" being based on file
size and quality) are:

Sorenson video 3 (PC & Mac - codec ships with quicktime)
Ligos Indeo Video 5 (PC, Mac, UNIX Xanim - www.ligos.com)
DivX (MPEG-4) (PC, Mac & Linux - free codec www.divx.com)

If you have access to a PC, I *highly* recommend Ronn Kling's AVI2IDL
windows only .dlm based on Oleg Kornilov's code which provides an interface
to the Win32 AVIFile interface. This is by far the easiest way to create
high quality animations using IDL. If not, you'll want to write the
individual frames to disk and find a program that can stitch them together.

I'm sure there are many for the Mac, but it might be more difficult to find
good ones that run on Linux or other UNIX systems (mainly because the codecs
aren't available, at least for free).

-Rick