
Subject: Re: MPEG problem

Posted by nobody@nowhere.com (S on Tue, 02 Oct 2001 17:21:12 GMT

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Rick & Marc:

There's quite a lot of information here, but what is the REASON Rick so adamantly recommends dumping MPEG? The answer to Marc's original post is most likely a problem with Windows Media Player. IDL's MPEG routines use MPEG-2 and you are free to use non-standard (non-Microsoft-approved) sized frames. Various versions of Windows media player have problems with MPEG-2 or frame size, as Rick pointed out. This is more an indication of Microsoft's policy of not supporting open standards than a problem with MPEG itself. The standard workaround is to use VMPEG, an mpeg player for windows that doesn't have those limitations. It's also worth noting that IDL's MPEG routines have compromised and set the compression/quality to something like 75% (last I checked on it). I use mpeg_encode (Stanford freely available encoder), for more flexibility.

RSI has always supported multiple platforms and open standards, maybe that's why they chose to use MPEG. MPEG is best suited to live video (Motion Picture ... EG) and animations are often better achieved using other formats (Mark Hadfields discussion of .flc makes some good points, I'd recommend visiting this web site). MPEG is also non-proprietary, so you don't have to pay for it and you can even examine the code to try to understand how it works. Quicktime is a collection of mostly proprietary codecs which, even if you can get a free decoder, you need to pay for an encoder (I can think of only one exception). The quality can be better than MPEG, but the compression may be lower, I think this really depends on the content and particular codec. AVI can give very good compression and high quality, it is however locked to the Windows platform and you'll need to pay (as far as I know anyways) for anything that will produce an AVI.

It's my observation, that you'll have to keep paying, as the AVI codecs keep changing and it seems older codecs stop being supported. I'm interested to hear about the free Indeo codec, I visited Ligos web site, it looks like the encoder is available only as a demo, is that correct Rick? What about VideoMach, their web page mentions "the commercial" version, what's the difference? Do you really produce quality AVI's with free software?

If you are committed to Microsoft Windows operating system, probably Rick's advice is sound: trying to use open standards will be an uphill battle. I do have to applaud RSI's decision not to cave to this pressure, as in the GIF issue. Anyways, I hope Marc got the answer he was looking for.

On Mon, 1 Oct 2001 09:36:43 -0700, Rick Towler <rtowler@u.washington.edu> wrote:

> The codec nightmare.....

>

> From the IDL docs:

>

> "Note - When creating MPEG files, you must be aware of the capabilities of
> the MPEG decoder you will be using to view it. Some decoders only support a
> limited set of sampling and bitrate parameters to normalize computational
> complexity, buffer size, and memory bandwidth. For example, the Windows
> Media Player supports a limited set of sampling and bitrate parameters. In
> this case, it is best to use 352 x 240 x 30 fps or 352 x 288 x 25 fps when
> determining the dimensions and frame rate for your MPEG file. When opening a
> file in Windows Media Player that does not use these dimensions, you will
> receive a "Bad Movie File" error message. The file is not "bad", this
> decoder just doesn't support the dimensions of the MPEG."

>
> WMP's MPEG codec handles other dimensions and bitrates but you'll have to
> experiment to find out what works.

>
> What you really need to do is drop MPEG all together. If you are doing
> 8-bit color animations, take a look at Mark Hadfield's page on scientific
> animations at <http://katipo.niwa.cri.nz/~hadfield/gust/software/animation/>
> and try using .flc. If you are doing 16/24 bit animations I highly
> recommend looking into the intel indeo video 4 or 5 codecs (free), or the
> sorenson codecs available in quicktime pro (\$30). These codecs provide by
> far the best quality/compression rates of any of the common, free (or mostly
> free), legal codecs available.

>

> If you are interested in compatibility then stick with indeo video 4. There
> is a Xanim decoder available for this format. In windows it plays out of
> the box on 98/ME/2K machines (if not, the codec is free). I don't know how
> the Mac handles it out of the box but the codec is free. The quality is the
> same as the version 5 codec but it encodes around 20-30% slower. The indeo
> 5 codec is free too but I don't believe that there is a decoder available
> for Xanim. Also, .avi files encoded with version 5 *MAY* be able to be
> decoded with version 4 codecs but I haven't been able to test this. The
> intel codecs are available here: <http://www.ligos.com/indeo>

>

> If you go this route you will need a program to stitch together and encode
> your frames. I am using the windows shareware program videomach
> (<http://www.gromada.com/>) but I am sure there are others available.

>

> If you don't have access to a windows machine to do the encoding I still
> recommend dropping MPEG and finding some linux tools to encode the frames in
> a better format.

>

> Did I mention that you should quit using MPEG?

>

> -Rick

>

>

> ----- Original Message -----

> From: "Marc Schellens" <m_schellens@hotmail.com>

> Newsgroups: comp.lang.idl-pvwave

> Sent: Monday, October 01, 2001 1:51 AM

> Subject: MPEG problem

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>> I got a problem here with the IDLgrMPEG object.

>> When I generate mpeg files under linux, I can play them

>> with mpeg_play from linux, but not with the windows media

>> player.

>> Has anyone made similar experiences or even knows a workaround?

>>

>> thanks,

>>

>> :-) marc

> "Marc Schellens" <m_schellens@hotmail.com> wrote in message

> news:3BB82EA8.F5A0280C@hotmail.com...

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Steve S.

steve@NOSPAMmailaps.org

remove NOSPAM before replying