

Re: Question on compression

Source:

<http://www.tech-archive.net/Archive/Media/microsoft.public.windowsmedia.encoder/2006-06/msg00008.html>

- *From:* "Neil Smith [MVP Digital Media]" <neil@xxxxxxxxxxx>
 - *Date:* Sat, 03 Jun 2006 17:03:13 GMT
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Do you mean in the WM format / WM Encoder package ?

There are lossless audio codecs (go to about 60–75% of original size), but nothing specifically lossless for video. Screen capture codecs can come close, but have very limited uses and aren't practical for video (though they're pretty good for 16 bit desktop window capture)

A lot of the higher video bitrate codecs though can produce results pretty much indistinguishable from the original.

They take a lot of processing power (eg the WMV9 advanced profile or H264 on Quicktime) so as I said if you've got a mystery embedded system, I've no idea if it can cope with that level of data throughput in addition to its usual tasks.

Unfortunately your application is described in not too much detail, so it's hard to know exactly how to get the best compression without knowing the specifics of the application. I'm not really clear about the need for RGB in the compressed file too, and this incurs an extra performance penalty in the WMF space because the internal format doesn't use RGB.

Cheers – Neil

On Sat, 3 Jun 2006 08:17:02 –0700, RonC
<RonC@xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote:

Neil,

Thanks for your response. I will try huffyuv for now. It seems that they have WMplayer covered as far as codec usage as well. Are there any lowloss algorithms available? I might want to try one on the users even though they have said lossless.

Cheers,
RON C

Re: Question on compression

"Neil Smith [MVP Digital Media]" wrote:

On Fri, 2 Jun 2006 12:10:02 -0700, RonC
<RonC@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote:

I might be asking this in the wrong area. If si, please direct me to apfce where I can get an answer.

I have a program on a imbedded system (non-Windows) that now creates a raw rgb AVI video output. Naturally the bandwidth is a problem as the usage has increased. The ccd size has increased also. I would like to insert a lossless (a must!!) compression algorithm/codec into the program so that the bandwidth problems are reduced. Compression to 1/4 the size or smaller is a must.

Can anyone help me with what lossless compression algorithm/codec is available in c/c++ source so that the output will be a compatible AVI file usable in Windows Media Player and the like? Must be lossless and rgb.

If no one here has an answer, who might I contact?

I appreciate your help in advance.

I have no idea ! Usually people want to compress lossily to gain maximum compression, where you seem to need to maintain 100% fidelity instead. Hopefully somebody else will have a suggestion, though I did notice on the 100fps site they mentioned HuufYUV which may be close to what you need (though not RGB :-p)

http://www.100fps.com/file_sizes_of_lossless_compression.htm
<http://neuron2.net/www.math.berkeley.edu/benrg/huffyuv.html>

Since it's a free codec it could be possible to gain the source and write in your RGB requirement.... it's also very small and quite fast, so it could well suit an embedded system with limited CPU resources.

Cheers – Neil

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