
Subject: Problem with MJ2 extension

Posted by [tarequeaziz](#) on Sat, 24 May 2008 04:16:58 GMT

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Hello IDL gurus,

I am having some trouble regarding '.mj2' extension. I have couple of '.gif' files and by using IDLffMJPEG2000

I can get some nice animation. But the fun just ends there. I need to have these on a more 'portable' formats as in : avi,mpeg,mov etc. A little searching on the net did not bring anything home.

I was hoping to get some pointers on how to convert these mj2's avi/mpeg/ mov etc.

Any help will be highly appreciated.

Best,

Tareque

Subject: Re: Problem with MJ2 extension

Posted by [tarequeaziz](#) on Tue, 27 May 2008 22:01:56 GMT

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On May 27, 8:14 am, "Haje Korth" <haje.ko...@nospam.jhuapl.edu> wrote:

> I agree that the MJ2 format is still poorly supported. But the fact that no
> inter-frame compression is used is THE advantage of the format. This way
> each image accurately represents the underlying scientific dataset and
> individual images are not smeared by the codec algorithm. It is accuracy
> that matters, not file size!

>

> Haje

>

> "Mark" <mark.h...@gmail.com> wrote in message

>

> news:f8abc45e-0628-4f6a-96d7-a35715f5c63a@v26g2000prm.google groups.com...

>

>> On May 24, 4:16 pm, tarequea...@gmail.com wrote:

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>

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>>> mpeg/ mov etc.
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>> For now, writing MJPEG-2000 animations is a waste of time because
>> there's very little software to play the file or convert it to
>> something else. You're better off writing from IDL straight to the
>> format you want. There's some discussion on this right now on a thread
>> entitled "animated png: a new format for scientific animations".
>
>> In addition to being poorly supported, MJPEG-2000 suffers another
>> limitation that makes it not very good for scientific animations: it
>> fails to make any use of inter-frame compression methods. This means
>> the files are much larger than they need to be.

thanks....!!!

Subject: Re: Problem with MJ2 extension
Posted by [tarequeaziz](#) on Tue, 27 May 2008 22:02:32 GMT
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On May 27, 9:58 am, Bill Gallery <wgall...@aer.com> wrote:
> On May 25, 7:06 pm, Mark <mark.h...@gmail.com> wrote:
>
>
>
>> On May 24, 4:16 pm, tarequea...@gmail.com wrote:
>
>>> Hello IDL gurus,
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>>> I am having some trouble regarding '.mj2' extension. I have couple of
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>> limitation that makes it not very good for scientific animations: it
>> fails to make any use of inter-frame compression methods. This means

>> the files are much larger than they need to be.
>
> FYI:
>
> MJPEG-2000 files can be played on MS Media Player if you install the M-
> JPEG codec V3 from Morgan Multimedia
>
> <http://www.morgan-multimedia.com/index.htm>
>
> Note: it says that this is a trial version that expires Oct, 2007, but
> it still runs after popping a reminder window.
>
> Bill Gallery
> Atmospheric and Environmental Research, Inc.
> Lexington, MA

Thanks...!!!

Subject: Re: Problem with MJ2 extension
Posted by manodeep@gmail.com on Wed, 28 May 2008 07:54:03 GMT
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On May 23, 11:16 pm, tarequea...@gmail.com wrote:

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>
> I am having some trouble regarding '.mj2' extension. I have couple of
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>
> Any help will be highly appreciated.
>
> Best,
>
> Tareque

If you can extract the individual frames (imagemagick's "convert"
tool?) , then
you should be able to use ffmpeg to stitch together the frames to
almost
all the standard movie formats. I tend to use ffmpeg quite routinely
to
convert a sequence of png's to avi/wmv/mp4. An advantage of the

mp4 is that you can set the frame rate to arbitrary values -- particularly useful for scientific visualisations.

Cheers,
Manodeep

Subject: Re: Problem with MJ2 extension
Posted by [Mark\[1\]](#) on Wed, 28 May 2008 21:37:08 GMT
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On May 28, 12:14 am, "Haje Korth" <haje.ko...@nospam.jhuapl.edu> wrote:

- > I agree that the MJ2 format is still poorly supported. But the fact that no
- > inter-frame compression is used is THE advantage of the format. This way
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- > individual images are not smeared by the codec algorithm. It is accuracy
- > that matters, not file size!

It depends on the purpose, obviously, and there are purposes for which MJ2 is appropriate (or will be when it's more widely supported) however those purposes generally don't match my needs.

However I would like to dispute your suggestion that inter-frame compression necessarily degrades accuracy. In principle, animations with inter-frame compression can store all the information required to reconstruct any given frame, it's just that they spread it over several frames.

For scenes with a limited number of colours, the old-style AVI codecs like Microsoft RLE (8-bit) and Microsoft Video 1 (16-bit) work very well. These use simple intra-frame compression plus simple inter-frame compression. They are either lossless (RLE) or nearly so (Video 1) and they achieve reasonably small file sizes and very fast playback.

Subject: Re: Problem with MJ2 extension
Posted by [Haje Korth](#) on Thu, 29 May 2008 12:26:10 GMT
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Mark,
I agree that in principle inter-frame compression does not necessarily have to result quality loss by definition. However, my statement was based on real-life my experience with the MPEG codec, which yields terrible results all the time. MJ2 is the only built-in IDL format which gives presentable animation results. As someone else here pointed out that without an IDL

installation you need to pay for the playback codec, which is less than ideal. Therefore I still use VP3 (predecessor of theora) codec with the AVI DLM, which works just as well -- at least on Windows.

Haje

"Mark" <mark.hadf@gmail.com> wrote in message
news:825110b6-dbe0-4e6c-8a00-4a64aabab84c@p39g2000prm.google groups.com...

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