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Subject: Re: animated png: a new format for scientific animations

Posted by [Vince Hradil](#) on Wed, 21 May 2008 15:38:44 GMT

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On May 21, 9:28 am, pgri...@gmail.com wrote:

- > Hi folks,
- >
- > production of animations (i.e. movies) is one
- > perennial subject of discussion in this group.
- > One of the main difficulties is the large number
- > of mutually incompatible formats, not always
- > equally well supported by different platforms
- > and softwares.
- >
- > Furthermore, scientific animations are not well
- > suited to lossy compression schemes (i.e. jpeg,
- > mpeg etc.) such that the quality is in general
- > low, or the file size huge when higher bitrate
- > is used.
- >
- > For still images, the alternative png format
- > has been available for some time, and has
- > become the format of choice for plots etc.
- > So it seems quite logical that
- > png animations should be the way to go.
- > The mozilla folks have come up with a new
- > specification for animated pngs that is supported
- > in firefox 3. I tried out the new format and
- > I can confidently say that the quality is much
- > better than any other movie format I have ever
- > seen, and the file size is quite reasonable.
- >
- > I've put up an example, but bear in mind that
- > to be able to see the animated png you'll need
- > the firefox 3 beta (release candidate)!
- >
- > The web page show the animated png and 3 quicktime
- > movies of increasing quality (and file size!).
- >
- > <http://hea-www.harvard.edu/~pgrigis/scianim/index.html>
- >
- > Of course, the availability (finally!) of a good
- > format specification for scientific animations does
- > not mean that it is easy or convenient to use.
- > The main problem now are the fact that only a few
- > player and encoders are available.
- >
- > On the other hand, you can play the movies with

- > firefox 3 and you can endcode the images using
- > a (closed source) command line java utility
- > (<http://www.reto-hoehener.ch/japng/>), therefore
- > at least a minimum of multiplatform support already
- > exist.
- >
- > Anyway, if you are willing to live with the limited
- > support for the format, it will probably give you
- > the best quality for your scientific animations
- > (and arguably is still a better solution than having
- > IDL open and issuing for i=0,100 do tv,img[\* ,\*,i] ;-)
- >
- > Ciao,
- > Paolo

Nice - thanks for the demo. I'd also like to point out that XnView (v1.92 or greater) can view the APNG.

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Subject: Re: animated png: a new format for scientific animations  
Posted by [jeffnettlles4870](#) on Wed, 21 May 2008 17:45:25 GMT  
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On May 21, 11:38 am, Vince Hradil <[hrad...@yahoo.com](mailto:hrad...@yahoo.com)> wrote:

- > On May 21, 9:28 am, pgri...@gmail.com wrote:
- >
- >
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> Nice - thanks for the demo. I'd also like to point out that XnView  
> (v1.92 or greater) can view the APNG.

I wouldn't be surprised if ImageMagick didn't also support these files very soon. I know they already support creating .MNG files which I believe is an older specification of the animated PNG format. I mention this because ImageMagick has popped up in other discussions on this newsgroup recently :)

Jeff

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Subject: Re: animated png: a new format for scientific animations  
Posted by [David Fanning](#) on Wed, 21 May 2008 17:52:45 GMT  
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jeffnettlles4870@gmail.com writes:

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- > very soon. I know they already support creating .MNG files which I
- > believe is an older specification of the animated PNG format. I
- > mention this because ImageMagick has popped up in other discussions on
- > this newsgroup recently :)

Yeah, if I'm not around here for awhile, look for me over  
on the ImageMagick newsgroup. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

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Subject: Re: animated png: a new format for scientific animations  
Posted by [Kenneth P. Bowman](#) on Wed, 21 May 2008 19:10:05 GMT  
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In article

<9cad603-0d6a-4881-b33b-52c25e194bba@59g2000hsb.googlegroups.com>,  
pgrigis@gmail.com wrote:

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- >
- > <http://hea-www.harvard.edu/~pgrigis/scianim/index.html>

It has been possible to make QuickTime movies using PNG compression  
for quite a while. On a Mac or PC you can do it with QuickTime Pro (\$30)  
Graphic Converter (Mac only, \$30), or other utilities.

Here's an example

[http://start.tamu.edu/research\\_flights/rf04/start08\\_rf04.mov](http://start.tamu.edu/research_flights/rf04/start08_rf04.mov)

Ken Bowman

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Subject: Re: animated png: a new format for scientific animations

Posted by [Mark\[1\]](#) on Thu, 22 May 2008 22:04:12 GMT

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AVI with MS Video 1 codec, 85% quality. Play it with Imagen. All you need (on Windows, anyway).

Re animated PNG, I'm sceptical. A group of enthusiastic, very smart people spent years developing MNG with the intention it would replace animated GIFs. All that effort came to nothing, basically, because 10 years on there are very few applications that support it. As to the reasons for the failure, I'm sure someone could write a book about it.

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