Subject: How to use RLE compression to print a series bmp images?
Posted by fudadmin on Mon, 12 Jun 2006 15:03:58 GMT
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Ok, then, forget agg. Let's say how is it possible to save bandwidth when printing a series bmp images? Use RLE compression?

Subject: Re: How to use RLE compression to print a series bmp images?
Posted by mirek on Mon, 12 Jun 2006 16:26:00 GMT
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fudadmin wrote on Mon, 12 June 2006 11:03Ok, then, forget agg. Let's say how is it possible to save bandwidth when printing a series bmp images? Use RLE compression?

I am sorry I have confused you with "RLE" term... It is rather "RLE-like"...

DrawData performs this automatically. Just see DrawData.cpp.

Note: I plan to provide similar optimization for all images scaled up for printer. At the moment, it is ToDo...

Note2: Maybe this "RLE-like compression" looks stupid, but it is already tested in practice and works indeed very well...

Note3: Please really do make a look at DrawData.cpp, DrawDataOp. It will save a lot of time and posts

Mirek

Subject: Re: How to use RLE compression to print a series bmp images?
Posted by fudadmin on Mon, 12 Jun 2006 19:43:27 GMT
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luzr wrote on Mon, 12 June 2006 17:26fudadmin wrote on Mon, 12 June 2006 11:03Ok, then, forget agg. Let's say how is it possible to save bandwidth when printing a series bmp images? Use RLE compression?

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Mirek

1. to Note2 - please don't have any impressions that I suspect your ideas stupid. Quite opposite. I want to learn the best parts of your programmers thinking (if not all...).

2. Are you talking about an alternative to png and jpg image format?

3. As I understand from DrawDataOp, it goes "fishing" for one color rectangles (bigger than something) and then outputs them with DrawRect (hardware accelerated) while "to small to bother" - "hardware not digestive" other areas are optimally "rectangalized" into image rectangles and pumped as RGBA pixels?
(Just can't find where palette colors come into game...)

this is at least what I think would be effective...

Subject: Re: How to use RLE compression to print a series bmp images?
Posted by mirek on Mon, 12 Jun 2006 20:05:32 GMT
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fudadmin wrote on Mon, 12 June 2006 15:43

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Well, finally gettin somewhere

JPG and PNG do not play a big role here. Perhaps you are confused by the fact that at the same time, the only registered data format is "file-format", which covers JPG and PNG, however, this is

helpful in storing the image to Drawing and in fact, data can by anything - software rendering recording being the very important option.

Pallette colors are least useful thing here - printers are never palette devices. IMHO, it is best to feed the full 24-bit color to printer in any case and let printer driver decide the best way of rendering it. Note also that a lot of printers are actually 24-bit color inkjets....

What I believe does help however is detecting those uniform color areas. E.g. while printing those scanned B&W documents (my major testcase), it reduces the amount of data send to printer driver by 80%.

Mirek

Subject: Re: How to use RLE compression to print a series bmp images?
Posted by fudadmin on Tue, 13 Jun 2006 01:48:31 GMT
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But in any case it has nothing to do with agg formats (yet...)
After seeing (quite a long time ago) some upp RLE things I somehow expected that some kind of compression will be applied for RGBA images anyway...

The main question then, still, is "how to use this "rectangalizing compression" (or how to call it?) for RGBA images?" Do I (or every user) have to register "RGBA-image" format? Shouldn't it be registered by default?

Subject: Re: How to use RLE compression to print a series bmp images?
Posted by mirek on Tue, 13 Jun 2006 14:20:54 GMT
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Well, if you would read my former posts more carefuly, you would notice that it is "TODO" for Draw. When done, this will be happening automatically.

IMHO, this is somewhat less important. Typically, if you need to save a lot of space, you need to store raster data in some other form anyway.

Mirek
