Subject: Re: Painter Posted by mirek on Thu, 22 Jan 2009 14:40:24 GMT View Forum Message <> Reply to Message

Tom1 wrote on Thu, 22 January 2009 08:34 Now I would like to know the road-map of the Painter development. (Maybe I have missed it somewhere else in the forum??)

Not really, I have to admit that I sort of got interested first and captured later doing this. But it was really missing for a long time.

Quote:

Is this new interface something that will be introduced for hardware based rendering too (entirely or partly) or is this only for the software based Painter?

It is meant to be solely sw based, at least for now.

Quote:

I did some quick benchmarking of the Painter versus Draw and found that the cost of using the Painter instead of Draw is about 10x..20x slowdown for rendering strokes. The fills are not that slow, but they still do not match the speed of Draw. I may well be dead wrong, but I guess the main reason for the huge slowdown is the anti-aliasing.

IMO, the main difference is the way how strokes are drawn. GDI simply draws lines, at least as long as line width is 1 - and in that case, it is often HW accelerated.

Painter first converts strokes to polygons and then draws them.

In future, we might consider optimizing this and draw strokes directly in important special cases.

BTW, you might also try to benchmark different line widths...

Quote:

Is there a way to disable anti-aliasing to speed up the rendering at the cost of quality? (I wish there was. Actually, I wish it could be turned on and off on-the-fly.)

Yes, there is "NoAA" attribute. But do not expect huge performance gains, it was rather added for printing where antialiasing does not look well.

Mirek