Subject: Re: let's discuss new Draw principles and problems...
Posted by mirek on Tue, 14 Feb 2006 11:12:29 GMT
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- We need RGBA because we need RGBA images. RGBA is simply the most generic format (well, theoretically we could also think about 8 bytes RGBA - 2 bytes per channel).

- From pumping perspective, on modern GPU (by modern I mean anything past 1998) the source format does not matter, as conversions are performed by GPU. However, it makes _huge_ difference for sofware rendering operations. What is even more important, you have to implement rendering just for single format.

- It is true that for rendering itself, HW acceleration does not matter. However, pumping to video memory can be bottleneck for many machines.

Actually, the original idea (valid for last year's plans) was exactly that - do everything in sofware. That was before you have run the tests on your machine, showing amazing 10fps pumping performance (worst case since that was 40fps on unodgs Duron and even that was barely acceptable, many machines are capable of 200+ fps on that test).

Another possible disadvantage of software rendering is that you cannot use it for printer (it would be too slow).

Yet another disadvantage is that software rendering places high(er) load on CPU (means higher overal power consumption - bad for laptops).

I believe that what we are working on now will provide reasonable compromise (default normal rendering, advanced software rendering where needed).

Mirek