Subject: Re: survey: accelerated 3D volumetric rendering
Posted by Rick Towler on Wed, 28 Feb 2001 01:08:14 GMT

David, you are always pushing that software rendering..... :)   I can't wait
for the day the software renderer is retired.

Software rendering is useless for real time rendering of 3d object graphics
scenes (at least the scenes I work with). It is true that hardware
rendering comes with quirks but at least on the PC the latest generation of
nvidia products are quite good. It all comes down to the drivers and in the
consumer market nvidia is the only company that I know of shipping decent
OpenGL drivers. The professional market is another question.

Most people probably shy away from volumes but I thought at least a few med
imaging people would pipe up.

-Rick Towler

"David Fanning" <davidf@dfanning.com> wrote in message
news:MPG.1505e00a9af63e39989d6e@news.frii.com...
> Rick Towler (rtowler@u.washington.edu) writes:
>
>> What are peoples experiences with accelerated 3d volumetric rendering.
I am
>> sure very high end unix viz workstations have the ability to accelerate
>> volumetric rendering but what about lower end hardware. Is this the
domain
>> of high end video adapters only?
>>
>> In my case we have a Sun Ultra60 with the Creator3d framebuffer and PC's
>> running consumer versions of nvidia's Geforce line. The Creator3d is
>> painfully slow rendering anything. The Geforce cards are quite fast
with
>> your standard polygon rendering but volumetric rendering isn't supported
in
>> hardware.
>>
>> Does anyone have any experience with this using nvidia's Quadro line or
with
>> 3dLabs cards? What about other platforms?
>>
>> fwiw, Sun just released the Expert3d lite which does support accelerated
>> volumetric rendering and when bundled runs for $2000. I guess that is
low
>> end....
>

> My experience with volume rendering with several different
> "inexpensive" graphics cards for PCs is that software
> rending is *always* faster than hardware rendering. (Not
> to mention prone to far fewer rendering errors.)
>
> I pretty much always have software rendering on as the
> default, and I make *sure* I have it on for any object
> graphics programs I distribute that have anything unusual
> going on in them.
>
> Cheers,
>
> David
> --
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