
Subject: Re: Object graphics under Linux: are they supposed to be that slow?
Posted by nobody@nowhere.com (S on Tue, 29 Jan 2002 16:25:52 GMT
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On Tue, 29 Jan 2002 14:55:49 +1300, Mark Hadfield <m.hadfield@niwa.co.nz> wrote:

> "Steve Smith<steven_smith>" <nobody@nowhere.com> wrote in message

> news:slrna5be3l.qih.nobody@pooh.nrel.gov...

>> Hi Mark:

>> I'm not sure I've the answer for you, but I suspect that the big

> difference

>> is in the graphics subsystem, the windows more than likely supporting the

>> hardware acceleration and Linux (XFree I'm assuming) not....

>

> I have had email responses from a few people. They tell me that IDL 5.5 on

> Linux does not use the system's OpenGL drivers even if they are available.

> This is because in RSI's judgement the hardware support on Linux is (as you
> note) rather flaky. This is likely to change in future versions.

>

At least in previous versions of IDL (up to 5.2), I've heard that IDL uses the hw-accel if it's available, but maybe that's changed. I always found the idl demo Open GL stuff to be pretty snappy, but I've no 3-D apps. If you're using XFree, I guess you should say XFree doesn't support hw-accel graphics Open GL or DRI with the same scope as Windows, since XFree is not Linux (and you don't have to use it, there are commercial Xservers that will support most cards).

> I suspect that on my system the graphics driver is so crippled that hardware
> rendering would not help IDL much. It doesn't make much difference under
> Windows. Windows describes the graphics controller as an "Intel 810 Graphics
> Controller Hub" with 4MB memory. That doesn't sound like much video RAM,
> does it? However I believe the Intel 810 can access system RAM. Anyway, it's
> quite possible that performance would improve significantly if I reduced the
> screen resolution. I will look into this and report back to the group.

>

I would be suprised if it didn't improve at lower screen resolutions. I would also look at the rest of the system and see that all your memory is being used, that you don't have a lot of crap running that doesn't need to (RedHat installs a lot of things you DO NOT need and usually don't want). The strong points of Linux and other open source OS's is that you can build your system from the ground up and you have control over everything. I didn't mean to say that any thing about Linux per say was 'flaky'. As a windows user, I'm sure the word is not foreign to you either (plenty of 'flaky' windows apps, subsystems). It is just that graphics is not a traditional strong point of Unix, except in the case of SGI, where they had complete control over the hardware and the software. With PC's, only in the last few years have they had access to high performance graphics systems, and MS-Windows has conspired to have a similar control over both hardware and software ends of the graphics subsystem, because of the potential market for 3D gaming, for instance. Meanwhile, the open source

mostly volunteer XFree project has endeavored to try to incorporate much of the rapidly changing hardware into X, sometimes by reverse engineering, a daunting task do doubt. In the end, if you can get good hw-accelerated graphics on a Linux box, it's by good fortune. You would have access to open source Open GL toolkits and could probably do some pretty neat stuff with it, but for the casual user this isn't useful.

>> I don't know what your reasons for moving to Linux were...
>

For me, it's in what they say: "... use the source, Luke!"

> I'm not sure myself! Better integration with other Unix systems mostly. I
> haven't really moved to Linux yet, just dipped my toe in the water and run
> back shivering. I haven't yet got my Linux setup to the stage where I can
> actually do productive work with it.
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> Mark Hadfield
> m.hadfield@niwa.co.nz <http://katipo.niwa.co.nz/~hadfield>
> National Institute for Water and Atmospheric Research
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Steve S.

steve@NOSPAMmailaps.org
remove NOSPAM before replying
