
Subject: Re: Why are iTools so slow?

Posted by [Mark Hadfield](#) on Tue, 05 Oct 2004 00:29:37 GMT

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Thanks for all the feedback, guys.

You may recall that my original posting said that the iTools system on my machine was very slow.

Marshall Perrin and David Fanning said, no, it wasn't slow for them, and perhaps it was a hardware renderer issue. (How many times has that advice been given on this newsgroup?)

Well it turned out to be good advice again. I changed the default Object Graphics renderer (in File/Preferences/Graphics) to "Software" and iTools speed improved drastically. So there is a hardware problem of some sort (I have an Asus 8170 adapter with an NVidia GeForce MX 440 chip.)

Rick Towler said that GeForce MX chips suck. Jim Pendleton (in email) suggested upgrading to the latest driver.

I'm still puzzled, because with this graphics card (which admittedly sucks) I generally find OG redraws are somewhat faster with the hardware renderer than with the software one. Not *much* faster, as one might hope, but definitely not slower, as the iTools suggest.

I did a bit of profiling and found most of the time is being taken in line 625 of `idlgrscene__define`, which is

```
self->IDLgrScene::Draw, oDest
```

That line is already surrounded by some timing code, so I added a statement to print out the time. With the software renderer, the drawing time for my 100 x 100 surface is 0.03-0.06 seconds; with the hardware renderer it is 0.015 seconds (the granularity of the Windows timer) but occasionally much more, up to 1 second. And here's the other funny thing with the hardware renderer: if I sit there twirling the scene around with the mouse, the redraws eventually become consistently fast! And that lasts (as far as I can tell) for the remainder of the IDL session. Some sort of caching is involved here, I guess.

So I was sitting there twirling my itool around, when I got a black-screen crash, something I've never encountered with this machine in 2 years. Ouch!

I did try upgrading to the latest driver. This produced no improvement, I started getting floating-point exceptions as I moved the mouse around over the iTool background and I got another black-screen crash.

So I reverted to the old driver and decided to stick with the safe, slowish, predictable IDL software renderer in future.

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