Subject: Re: Slow Time Test in IDL 5.4
Posted by mole6e23 on Fri, 27 Oct 2000 21:37:09 GMT
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davidf@dfanning.com (David Fanning) wrote:

> Before JD goes crazy trying to analyze slow Time_Test2
> values for IDL 5.4, let me alert you that a change to
> the IDL library routine FACTORIAL has made that routine
> *significantly* slower. So much so, that Time_Test2 runs
> about 10 times slower on PCs running IDL 5.4 than it does
> running earlier versions. :-(

But that doesn't seem to be the case on Alphas.

Because I don't want to publish a huge list of numbers:

Total time for time_test2

IDL 5.4 with 5.4 version of factorial: 4.700
IDL 5.4 with 5.3 version of factorial: 4.698
IDL 5.3: 5.594

A nice little speedup for 5.4 regardless of the version of factorial used.

Todd

Subject: Re: Slow Time Test in IDL 5.4
Posted by John-David T. Smith on Mon, 30 Oct 2000 15:02:35 GMT
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David Fanning wrote:
>
> Folks,
>
> Before JD goes crazy trying to analyze slow Time_Test2
> values for IDL 5.4, let me alert you that a change to
> the IDL library routine FACTORIAL has made that routine
> *significantly* slower. So much so, that Time_Test2 runs
> about 10 times slower on PCs running IDL 5.4 than it does
> running earlier versions. :-(
>
> RSI is working on the problem, but for the time being
> you may want to copy the IDL 5.3.1 factorial.pro over
> into your IDL 5.4 lib subdirectory. Having done this,
> we find the Time_Test2 to be noticeably faster in IDL 5.4
> than in IDL 5.3.1.

>

It was made clear to me from IDLSpecII that RSI's time_test suite is not really up to the task of performing reliable discrimination among multiple platforms. Too many of the tests were influenced primarily by OS caching or other OS-dependent issues.

I'm hoping to come up with an independent time testing routine suite for a new round of IDLSpec for 5.4 and up, though I'm not sure when I'll have time. If people (especially those with really fast machines) want to take a look at RSI's time_test.pro and come up with other creative, stable tests which cleanly divide between CPU and IO, and which more accurately reflect the bulk of time spent in your code, I'm happy to collect those for inclusion. Just try:

```
IDL> profiler, /system
IDL> mylongprocedure
IDL> profiler, /report
```

and look for the expensive routines.

The other major lacking component of the test suite is 3D graphics, though I think that will prove a major difficulty -- so many variable influences. I'm happy to take ideas on what a robust O.G./3D test would look like.

JD

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