
Subject: Re: IDLSpecIII -- Volunteer Needed
Posted by [Martin Schultz](#) on Fri, 08 Jun 2001 11:26:08 GMT
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John-David Smith <jdsmith@astro.cornell.edu> writes:

I'd advocate a WHERE (and general indexing) test. This is one of the functions I use most and on pretty large arrays, too.

Example:
PRO wtest

```
a = findgen(500, 500, 20)
a = transpose(a,)
; get start time
t0 = systime(1)
i = where(a gt 5000. AND a lt 10000.)
t1 = systime(1)
; get stop time

print,t1-t0
```

END

On my PentiumIII Dual 500MHz this takes about 0.6s

Cheers,
Martin

> I posted this deep in another thread, but thought I might just put it out for
> all too see. Sorry for the wasted bits.
>
>
> VOLUNTEERS NEEDED:
>
> I'd like to solicit volunteers to help construct IDLSpecIII, which will
> likely be based from IDLv5.5, including the MasOSX version, and will
> probably be hand rolled, rather than based on the problematic time_test
> suite supplied by RSI. I am happy to take care of the management and
> building the site. What I need most are performance nuts who want to
> devise reasonably taxing tests of processor, I/O, and graphics speed.
> I'm open to the idea of Object Graphics tests too, but I don't have much
> experience there. Among the desiderata:
>
> 1. A suite of processor-intensive tests (must fit in memory -- we don't
> want to test the Virtual Memory of the OS with this! -- is 32MB a

> reasonable assumption for free real memory available to IDL?). Some of
> the tests in !DIR/lib/time_test.pro are relevant: array addition, for
> loop speed, matrix inversion, etc. I'd like to add more "real world"
> processor-intensive code, based on common user operations. (Histogram,
> anyone?)
>
> 2. A suite of several I/O performance tests. Currently only
> read/writes of a 512x512 byte array (that's right, 256kB) occur. This
> obviously fits in the disk cache of most hard drives, not to mention the
> OS cache. 10-50MB is probably a more reasonable test size. Is 100MB
> reasonable, in the context of multi-GB drives?
>
> 3. A suite of direct graphics tests. The standard graphics_times may
> suffice here, with maybe a pixmap copy added. Others?
>
> 4. (Possible) A suite a object graphics tests, with and without
> hardware rendering enabled. This one will be all over the map, I
> suspect. To run this test, users *must* specify a video card.
>
> The chief guiding principle to keep in mind is separation of subsystem
> taxed: mixing processor tests with I/O tests (as is hard to avoid on
> modern VM/cached OS's) dilutes their discriminatory power.
>
> Please let me know if you're interested.
>
> Thanks,
>
> JD

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