
Subject: Re: IDLSpecII and beyond

Posted by [Martin Schultz](#) on Thu, 23 Mar 2000 08:00:00 GMT

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"J.D. Smith" wrote:

>

>
> 2. Bring in more relevant routines.. the real work horses that people are
> using, and whose speed they really care about. You can use:
> IDL> profiler, /RESET, /SYSTEM
> IDL> my_slow_routine_which_runs_overnight
> IDL> profiler, /REPORT
> and look for the most heavily used and slowest system (S) routines. Up to know,
> we've been testing: basic array math, shift(), randomu(), ludc(), transpose(),
> alog(), fft(), and smooth().
>
>
> I would appreciate any comments people have about the ingredients of an updated
> IDL speed test suite which are indispensable.
>
> Thanks,
>
> JD
>

Hi J.D.,

personally, I would like to see (1) a map test (e.g. the program attached) and

(2) a contour test. Other things I use a lot are WHERE and array-extraction operations.

Perhaps one should test scalability as well, for example:

pro wheretest

; test combination of where function and array extraction

; 1. small array size

m = findgen(100,100)

t0 = systime(1)

for i=0L,100 do begin

 w = where(m gt 100 AND m lt 1000)

 sub = m[w]

endfor

t1 = systime(1)

; 2. small array size

```

m = findgen(8000,4000)
t2 = systime(1)
for i=0L,3 do begin
    w = where(m gt 100 AND m lt 1000)
    sub = m[w]
endfor
t3 = systime(1)

print,'WHERE test : small array(100,100)*100 = '+string(t1-t0)+' s'
print,'          large array(8000,4000)*3 = '+string(t3-t2)+' s'
end

```

On my machine (Dual Pentium III 500 MHz, Matrox Millenium 400, 1GB Memory, Suse Linux 6.3), I achieve the following results for these tests:

```

MAPDEMO (100 cycles) :    11.092647 s
WHERE test : small array(100,100)*100 =    0.064938068 s
              large array(8000,4000)*3 =    13.678791
s

```

Cheers,
Martin

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```
