Subject: Re: IDL Matrix Multiply and Dual-Core CPUs Posted by s.haenger on Tue, 20 May 2008 07:21:42 GMT

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On 9 Mai, 20:34, Pierre <pierre.villene...@gmail.com> wrote:
> Hi Samuel,
>
 I saw a very similar problem with my quad-core PC running XP (32 bit)
> with 4gigs of ram. I re-ran my test script on our two-core, 4-gig
> linux box and got similar results with just slightly different array
  sizes. Here is the script I ran:
> cpu, /reset
>
 help, !cpu, /str
>
> Nk = 258
  K = fltarr(Nk, Nk)
  ; Case 1.
> Npix = 129047
> d = fltarr(Npix, Nk)
> t0 = systime(1)
>
> d \# = K
> t1 = systime(1) - t0
  print, 'Case #1: ', Npix, t1
>
>
  ; Case 2.
>
> Npix = Npix + 1
> d = fltarr(Npix, Nk)
> t0 = systime(1)
 d #= K
>
>
  t2 = systime(1) - t0
> print, 'Case #2: ', Npix, t2
>
> On each of our computers case #2 used all available cores while case
> #1 only used one core. The only difference between them is the
> dimension of one of the arrays (Npix) is simply incremented by one.
```

- > The total memory used by the IDL process during this test is never
- > more and two-hundred megs or so. There is no way this problem is due
- > to a lack of physical memory. The sizes of these arrays are also
- > significantly larger then the default minimum number of elements
- > (default = 10000) required to enable multi-threading.

- > Any ideas?
- > Pierre

It's not a Windows Problem. We have the same Problem also with Ubuntu...