Subject: Re: Doing Nothing Takes Longer Than Doing... Nothing? Posted by justspam03 on Wed, 11 Feb 2004 17:17:10 GMT

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Hi,

same on my machine - minimal but consistent time differences. Differences when calling the same function in both loops are negligible, though.

I found that adding a call to one of the two test functions before the main loop will make the loop that calls this function run faster.

E.g. in your test program below with the added line, the 2nd loop runs faster than the 1st.

Maybe (wild speculation mode on) it's got to do with how IDL internally manages function calls/function lists - calls to functions further up in the list would be faster than calls to functions further down the list? (wild speculation mode off) Cheers

Oliver

>	
>	;======================================
>	pro testroutine1
>	end
>	;======================================
>	pro testroutine2
>	end
>	;======================================
>	pro testroutine3
>	end
>	;======================================
>	pro benchmark
>	
>	NREPS=5000L
>	NAVGS=50L
>	
>	profiler, /SYSTEM, /CLEAR, /RESET
>	profiler, 'testroutine1'
>	profiler, 'testroutine2'
>	profiler, 'testroutine3'
>	
>	;==== added this line ====
>	testroutine2

```
> delt1 = dblarr(navgs)
> delt2 = dblarr(navgs)
> for j = 0L, navgs-1L do begin
>
    ; TIME ROUTINE NUMBER 1...
>
    tstart = systime(1)
>
    for i = 1L, nreps do begin
>
       testroutine1
>
    endfor
>
>
    delt1[j] = (systime(1)-tstart)
>
>
    ; TIME ROUTINE NUMBER 2...
    tstart = systime(1)
>
    for i = 1L, nreps do begin
>
      testroutine2
>
    endfor
>
    delt2[j] = (systime(1)-tstart)
>
>
    ; UPDATE OUR PROGRESS...
>
    print, 100*j/(navgs-1), format='($,"Progress: ",I4,"%",%"\R")'
>
>
 endfor
> :=========
> ; GET THE AVERAGE TIMES...
> avg1 = delt1/double(nreps)
> avg2 = delt2/double(nreps)
>
> ;=========
> ; GET THE MEANS...
> mnavg1 = total(avg1,/DOUBLE)/double(navgs)
> mnavg2 = total(avg2,/DOUBLE)/double(navgs)
> ; TELL US ABOUT THE RESULTS...
> print, mnavg1, format='(2(%"\V"),"Average1 = ",e16.7," s")'
> print, mnavg2, format='("Average2 = ",e16.7," s",%"\V")'
>
> ; WHAT DOES IDL CODE PROFILER REPORT...
> print, 'IDL Code Profiler reports:'
> profiler, /REPORT
> profiler, /CLEAR
> end; benchmark
```