
Subject: Re: Scope_Varfetch "IDL workbench" train wreck
Posted by [penteado](#) on Wed, 18 Nov 2009 19:36:58 GMT
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On Nov 18, 4:19 pm, wlandsman <wlands...@gmail.com> wrote:

> I recently received a note from a user saying that my procedure
> readcol.pro
> (<http://idlastro.gsfc.nasa.gov/ftp/pro/misc/readcol.pro>) - one of
> many such procedures to read an ASCII file into IDL variables -- was
> taking ~100 times longer to run from the IDL workbench than from the
> IDL command prompt. I of course replied that this was complete
> nonsense, and that the interface used to call the procedure shouldn't
> affect its speed.
>
> Of course, when I tested this, a run that took under 1 second from the
> command prompt completely hung my Mac (x86_64 darwin unix Mac OS X
> 7.1 Apr 21 2009 64 64) when run from the Workbench. My Linux box
> was not quite as bad but also eventually hung with messages such as
>
> java.lang.OutOfMemoryError: unable to create new native thread
> java.lang.ArrayIndexOutOfBoundsException: 2601
>
> The culprit apparently is my use of SCOPE_VARFETCH. readcol.pro
> calls SCOPE_VARFETCH thousands of times for a large file, since it
> writes data directly into the output variables, and uses a
> SCOPE_VARFETCH call for each item written.
>
> Below is a little test program to be called with
> IDL> test, x1,x2,x3,x4,x5,x6,x7,x8,x9
>
> I find it runs instantly from the IDL command line but takes very long
> or hangs the IDL workbench. --Wayne
>
> pro test,a,b,c,d,e,f,g,h,j
>
> vv = ['a','b','c','d','e','f','g','h','j']
> for k=0,8 do begin ;Create output variables
> res = execute(vv[k] + '=fltarr(5000)')
> endfor
> for jj=0,4999 do for k=0,8 do (scope_varfetch(vv[k],Level=0))[jj]=
> float(jj)
> return
> end

Very odd. It ran in the Workbench in about the same time, but after it is done, a lot of error messages get written to the terminal from which I called the Workbench, and after a few seconds, the Workbench dies with the same kind of error messages. This is with IDL 7.1 on

Fedora 11 64 bit.

I tried turning off some visualizations (I thought that Debug and Variables might be doing something to keep track of the call stack and local scope variables, and the problem might be there), but saw no change. I would write to ITTVIS, since this is definitely a bug.
