Subject: Re: Question on IDL Error: Unable to free memory: from array descriptor
Posted by David Fanning on Thu, 03 Apr 2003 14:41:39 GMT

View Forum Message <> Reply to Message

Ken Knapp (Ken.Knapp@noaa.gov) writes:

> I have recently upgraded to IDL 5.6. I have searched the web and this
> newsgroup (thanks to google) for an answer and have yet to find
> anything. I have used IDL for ~8 years and have never run across this
> problem until now and it happens so frequently to me, I am surprised
> that it doesn't affect others.
>
> PROBLEM:
> When processing satellite code, sometimes IDL bombs out with the
> following message:
> Loop over image
> % Unable to free memory: from array descriptor.
>   Interrupted system call
> % Execution halted at: PROC_TAU   1634
>   /home/kknapp/work/lib/idl/goes/gasp9.pro

This is a new one to me. Too much memory on that
machine, probably. The programming gods sometimes
do this as punishment for hubris. :-)

Cheers,

David

--
David W. Fanning, Ph.D.
Fanning Software Consulting, Inc.
Phone: 970-221-0438, E-mail: david@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: Question on IDL Error: Unable to free memory: from array descriptor
Posted by Ken Knapp on Fri, 04 Apr 2003 14:45:35 GMT

View Forum Message <> Reply to Message

David Fanning wrote:
>
> This is a new one to me. Too much memory on that
> machine, probably. The programming gods sometimes
> do this as punishment for hubris. :-)
>
But, it worked fine before and I never saw this error until the 5.6

upgrade. I suspect there is cross talk between IDL and some other process, but I don't know how to test that or figure out what is causing it.
Thanks-
-Ken

--
<>< <>< <>< <>< <>< <>< <>< <><
Kenneth Knapp   CIRA Visiting Scientist
NOAA/NESDIS/ORA   Ken.Knapp@noaa.gov
E/RA1, RM 711C, WWBG   Phone:301-763-8053x195
5200 Auth Rd.   Fax:301-763-8108
Camp Springs, MD 20746-4304

Subject: Re: Question on IDL Error: Unable to free memory: from array descriptor
Posted by Dick Jackson on Mon, 07 Apr 2003 17:10:48 GMT
View Forum Message <> Reply to Message

Hi Ken,

"Ken Knapp" <Ken.Knapp@noaa.gov> wrote in message
news:6146a9fd.0304030627.361c402e@posting.google.com...
>
> PROBLEM:
> When processing satellite code, sometimes IDL bombs out with the
> following message:
> Loop over image
> % Unable to free memory: from array descriptor.
>   Interrupted system call
> % Execution halted at: PROC_TAU   1634
>   /home/kknapp/work/lib/idl/goes/gasp9.pro
>
> [...]
>
> SYSTEM:
> Linux Redhat 7.1
> IDL 5.6 (recent upgrade)
> -plenty of RAM (1Gb) and swap

David's idea (too much memory) is plausible, in that it can make us
think we're invincible to memory shortages! A client of mine got a 2GB
machine, and we promptly found a way to exhaust it with some insanely
large images and processing methods.

Since the error message mentioned "array descriptor" I thought of an
issue that came up for me a while ago. The issue is summarized at:
http://www.dfanning.com/misc_tips/submemory.html

Any big array subscripting going on around line 1634? (don't know why
"Unable to free memory" would be the problem, but have a look anyway)

Cheers,
--
-Dick

Dick Jackson   /   dick@d-jackson.com
D-Jackson Software Consulting /   http://www.d-jackson.com
Calgary, Alberta, Canada   / +1-403-242-7398 / Fax: 241-7392

Subject: Re: Question on IDL Error: Unable to free memory: from array descriptor
Posted by K. Bowman on Thu, 17 Apr 2003 14:00:52 GMT
View Forum Message <> Reply to Message

In article <3E8D9A8F.D04B00A3@noaa.gov>, Ken Knapp <Ken.Knapp@noaa.gov>
wrote:

> But, it worked fine before and I never saw this error until the 5.6
> upgrade. I suspect there is cross talk between IDL and some other
> process, but I don't know how to test that or figure out what is causing
> it.

I've been getting the same kind of messages, sometime arrays, sometimes
other things:

  % Unable to free memory: freeing string memory.
   Interrupted system call

  IDL> PRINT, !VERSION
  { x86 linux unix linux 5.6 Oct 26 2002   32   64}

This is a non-reproducible error. Re-running the same program in a new
IDl session (usually) results in no errors.

While I was writing this message, this happened to a different IDL
process on the same Linux system.

   Segmentation fault (core dumped)

This is really not good.

Ken Bowman