
Subject: Re: IDL crashing badly on my solaris 8 system
Posted by [Liam E. Gumley](#) on Mon, 30 Jul 2001 19:04:53 GMT
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Jonathan Joseph wrote:

> On 2000/11/07 Peter Clinch wrote:

>

>>> Has anyone had any problems with IDL 5.4 stability?

>>

>> Just installed it. Looked in the What's New book, and XVOLUME and XROI
>> look like useful thingies, so I fire them up with the example code in
>> the book, and after several pages of font errors IDL crashes out with a
>> core dump. Hey ho...

>>

>> Waiting for RSI to get back to me, will probably nudge them later
>> today. So far, not a Big Win!

>>

>> That's on Solaris 8/SPARC on an Ultra 30.

>

> I couldn't find any posted solution to peter's problem.
> I am seeing what may be a similar problem. While I haven't
> personally seen a bunch of font errors printed out, one of
> our student's has - probably the way I caused the crash caused
> the window to be obscured so I could not read the errors.
> I could not check for errors afterwards, because the crash
> not only kills IDL, but it kills the whole CDE session.

>

> I can cause this crash easily and consistently by firing up
> the IDL demo:

>

> IDL> demo

>

> Then clicking on the "visualization" button then clicking on
> the "flythrough" button. A big mostly blank window pops up, then
> shortly thereafter, my CDE session terminates.

>

> Here's my system info.

>

> # uname -a

> SunOS cayman 5.8 Generic_108528-08 sun4u sparcsun4 SUNW,Sun-Blade-1000

>

> Can anyone offer any suggestions?

Get in touch with RSI tech support:

<mailto:support@researchsystems.com>

I think a patch is required from Sun to fix a problem with Solaris.

Cheers,
Liam.
Practical IDL Programming
<http://www.gumley.com/>

Subject: Re: IDL crashing badly on my solaris 8 system
Posted by [Peter Clinch](#) on Tue, 31 Jul 2001 09:17:57 GMT
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Jonathan Joseph wrote:

> I couldn't find any posted solution to peter's problem.

Corresponded privately with Jonathon about this, and it seems he has a different problem: found I could work around mine by starting dtlogin sessions as C/Posix rather than the GB locale.

Pete.

--

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Subject: Re: IDL crashing badly on my solaris 8 system
Posted by [Jonathan Joseph](#) on Wed, 01 Aug 2001 17:46:49 GMT
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Still crashing the CDE session - but I now have more info.

Both Peter Clinch and RSI very promptly (thank you) suggested that I select C Posix from the language menu at the login screen. Unfortunately, this did not solve my problem.

It turns out that the font error messages may have been a red herring. After questioning the student, I discovered that his problem resulting in a bunch of font error messages followed by a crash of IDL, and the IDL crash that crashed the whole CDE session were two distinct problems. Perhaps the C-Posix idea will fix font problem crash, but I'll worry about that later.

We found that we could easily reproduce the CDE session crash by typing the following command:

```
IDL> xplot3d,[1],[1],[1]
```

So, I did a little digging to see if I could find the exact line in xplot3d.pro that caused the crash. And I could. It turned out to be the line:

```
oWindow->Draw, oScene
```

I then tried running one of my own object graphics programs, and it also killed the CDE session (presumably at the draw command, but I didn't verify that).

So, the problem seems closely tied to using object graphics. Can anyone out there make an educated guess as to how this might result in a crash of the CDE session?

I've crashed the session using either IDL 5.3 or 5.4, so if it's an IDL bug it's not a new 5.4 problem.

Thanks for any input.

-Jonathan

Subject: Re: IDL crashing badly on my solaris 8 system
Posted by [Jonathan Joseph](#) on Wed, 01 Aug 2001 19:44:04 GMT
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Eureka!

Well, I had the notion that it might possibly have something to do with hardware rendering (which I didn't realize was turned on by default).

Once I figured out how to toggle to software rendering (in IDLDE preferences) BINGO, it worked beautifully.

So, 2 questions:

- 1) is there a similar way to turn off hardware rendering from the IDL prompt (not in IDLDE mode)?
- 2) what can I do to get hardware rendering working on this machine? and is it worth it?

OK, that's really 3 questions.

Thanks a bunch.

-Jonathan

Jonathan Joseph wrote:

>
> Still crashing the CDE session - but I now have more info.
>
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> I select C Posix from the language menu at the login screen.
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> but I didn't verify that).
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> So, the problem seems closely tied to using object graphics.
> Can anyone out there make an educated guess as to how this
> might result in a crash of the CDE session?
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> I've crashed the session using either IDL 5.3 or 5.4, so if it's
> an IDL bug it's not a new 5.4 problem.
>
> Thanks for any input.
>
> -Jonathan

Subject: Re: IDL crashing badly on my solaris 8 system
Posted by [david\[2\]](#) on Wed, 01 Aug 2001 19:56:55 GMT

Jonathan Joseph writes:

- > Well, I had the notion that it might possibly have something
- > to do with hardware rendering (which I didn't realize was
- > turned on by default).
- >
- > Once I figured out how to toggle to software rendering
- > (in IDLDE preferences) BINGO, it worked beautifully.
- >
- > So, 2 questions:
- >
- > 1) is there a similar way to turn off hardware rendering
- > from the IDL prompt (not in IDLDE mode)?

There is no way to turn hardware rendering off from the IDL command line, to my knowledge. But you can select software rendering on your draw widget with the RENDERER=1 keyword.

- > 2) what can I do to get hardware rendering working on this machine?

Get a decent graphics card.

- > and is it worth it?

Hard to say. 95% of the craziness in object graphics programs can be tied directly to the hardware rendering. On programs I write that are suppose to run everywhere, I always render in software. Surprisingly enough, for a great many things, this is even faster than hardware!

If your object graphics program does things that *can* be speeded up in hardware (lots of polygon rendering, I think), then it may be worth it to you to upgrade your graphics card. But just be sure your boss upgrades hers as well, or your cool demo is likely to fall flat on its face at the worst possible time. :-)

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438 E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: IDL crashing badly on my solaris 8 system
Posted by [Jonathan Joseph](#) on Wed, 01 Aug 2001 20:24:32 GMT
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David Fanning wrote:

>

>> 1) is there a similar way to turn off hardware rendering
>> from the IDL prompt (not in IDLDE mode)?
>
> There is no way to turn hardware rendering off
> from the IDL command line, to my knowledge. But
> you can select software rendering on your draw
> widget with the RENDERER=1 keyword.

That's a good idea, but unfortunately, that won't prevent built-in IDL functions (like the aforementioned xplot3d) from crashing the system. But I suppose if I let everyone who is likely to use this system know, I can avoid this eventuality.

>

>> 2) what can I do to get hardware rendering working on this machine?

>

> Get a decent graphics card.

>

>> and is it worth it?

>

> Hard to say. 95% of the craziness in object graphics
> programs can be tied directly to the hardware rendering.
> On programs I write that are suppose to run everywhere,
> I always render in software. Surprisingly enough, for
> a great many things, this is even faster than hardware!

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> If your object graphics program does things that *can*
> be speeded up in hardware (lots of polygon rendering,
> I think), then it may be worth it to you to upgrade
> your graphics card. But just be sure your boss upgrades
> hers as well, or your cool demo is likely to fall flat
> on its face at the worst possible time. :-(

>

> Cheers,

>

> David

Is that an anecdote from your personal experience David? :)

As it turns out, the object graphics programs I have written do happen to draw lots of polygons. Maybe I'll check the drivers first. I wonder if there ARE any solaris 8 drivers for any good graphics cards.

Thanks for the input.

-Jonathan
