
Subject: Re: IDL demo bug in 5.6 on MAC OS 10.2. YES is is broken

Posted by [michele.zundo](#) on Fri, 31 Jan 2003 09:26:20 GMT

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Yes, I can confirm it.

IDL 5.6 demo crashes on all our machines (ranging from G3 iBook to G4 desktop).

Our setup :

MacOS 10.2.3

X11 libraries from Apple (not XDarwin but it should be the same)

IDL 5.6

How to make it crash:

- 1) start X11
- 2) type in Xterm mypath/idl/idldemo
- 3) the demo windows starts OK but some of the demo e.g. Orbiting Satellite, flythrough, thunderstorm consistently crash. (my guess is that are invoking a specific routine which is broken.

***** IDL crash log

Thread 0 Crashed:

```
#0 0x960a0b78 in x_hash_table_lookup
#1 0x96085404 in glXSwapBuffers
#2 0x00122bd4 in XGLFlushGraphics
#3 0x00863620 in igSrcDestFlush
#4 0x00860558 in IDL_GrSrcDestDraw
#5 0x00a02bb0 in interpreter
#6 0x00b3b1f0 in IDL_Executive
#7 0x00a060f0 in IDL_InterpCallFromSysproc
#8 0x00a91960 in call_user_cb
#9 0x00a98bf4 in internal_widget_event
#10 0x00a98d84 in IDL_widget_event
#11 0x00a02b18 in interpreter
#12 0x00b3b1f0 in IDL_Executive
#13 0x0075dbf4 in IDL_RuntimeExec
#14 0x0075dc94 in IDL_Runtime
#15 0x000027ac in main
#16 0x000023ac in _start
#17 0x000021dc in start
```

*** Console LOG

XFree86 Version 4.2.1 / X Window System
(protocol Version 11, revision 0, vendor release 6600)
Release Date: 3 September 2002
If the server is older than 6-12 months, or if your hardware is
newer than the above date, look for a newer version before
reporting problems. (See <http://www.XFree86.Org/FAQ>)
Operating System: Darwin OSVendor
Using keymapping provided in /System/Library/Keyboards/USA.keymapping.
PseudoramiX screen 0 added: 1024x768 @ (0,0).
PseudoramiX screen 0 placed at X11 coordinate (0,0).
[DRI] screen 0 installation complete
Screen 0 added: 1024x768 @ (0,0)
IDL Version 5.6, Mac OS X (darwin ppc m32). (c) 2002, Research
Systems, Inc.

% Embedded IDL: Research Systems, Inc., IDL Demo.
% Unsupported X Windows visual (class: PseudoColor, depth: 8).
Substituting default (class: TrueColor, Depth: 24).
Jan 31 10:19:42 venezia crashdump: Crash report written to:
/Users/mzundo/Library/Logs/CrashReporter/idl.crash.log

/Applications/rsi/idl/bin/idldemo: line 23: 721 Bus error
\$IDL_DIR/bin/idl -em=\$IDL_DIR/lib/hook/demo.sav

Subject: Re: IDL demo bug in 5.6 on MAC OS 10.2. YES is is broken
Posted by [Karl Schultz](#) on Fri, 31 Jan 2003 17:30:08 GMT
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"Michele Zundo" <michele.zundo@esa.int> wrote in message
news:48b094e1.0301310126.a459b8a@posting.google.com...

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It seems to work for some object graphics programs and not for others. I think that the common characteristic of the programs that fail is that they use more than one object graphics window. I suspect that they have/had a bug with multiple context support. But that is only a guess and the actual problem and symptoms may be more or less severe.

Please see the following Tech Tip. It explains the situation and how you can configure your IDL installation to avoid using Apple's currently broken OpenGL support.

<http://www.rsinc.com/services/techtip.asp?ttid=3444>

Hopefully Apple will release a new version soon. I'm looking forward to seeing OpenGL hardware acceleration on OS X - the glimpses we've seen so far have looked promising. Again, the problem is in the X Server and/or the libraries that are dynamically linked with IDL. You should be able to install the fixed X server and libs without needing to update IDL, except for backing out any configuration workarounds explained in the Tech Tip.

Karl

Subject: Re: IDL demo bug in 5.6 on MAC OS 10.2. YES is is broken
Posted by [michele.zundo](#) on Tue, 04 Feb 2003 10:50:26 GMT
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Dear Karl,

A very big thanks !!! This will impress many of my colleagues.

Regards

"Karl Schultz" <kNOSPAMschultz@rsinc.com> wrote in message

```

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Subject: Re: IDL demo bug in 5.6 on MAC OS 10.2. YES is is broken
Posted by [kws](#) on Thu, 13 Feb 2003 18:24:33 GMT
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Update:

Apple has released Beta 0.2.1 of the X server, which fixes the problem described below (Object Graphics crashing with hardware rendering). I installed this beta and ran some tests. I'm very impressed with the result. For example, if you run "demo_tour", you'd better not blink during the first part of the Object World demo, or you'll miss it!!!!

So, IDL 5.6 works well "out of the box" with Apple's Beta 0.2.1 release of the X server. RSI has not done any official testing of this configuration, but things look pretty promising after some initial trials.

Please keep in mind that the Apple X server is still beta and that there are still lots of issues, mostly relating to integrating with the desktop and some other applications. But this seems to be a release that is good enough to use IDL with Object Graphics hardware rendering, particularly if you are OK with trying out beta software.

If you install this beta version to replace beta 0.1, be sure to remember to back out any workarounds that you put in place to avoid using hardware rendering. For example, remove the "Idl.renderer:1" setting in your X defaults file. The RSI tech tip referenced below has also been updated.

Big kudos to Apple for supporting an X server and really going all out with this beta program.

Karl

michele.zundo@esa.int (Michele Zundo) wrote in message
news:<48b094e1.0302040250.3adfeede@posting.google.com>...

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Subject: Re: IDL demo bug in 5.6 on MAC OS 10.2. YES is broken
Posted by [Jonathan Greenberg](#) on Fri, 14 Feb 2003 03:04:33 GMT
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I agree -- I sent RSI some updates for Apple's X11 -- anyone with v. 0.2 should update immediately to 0.2.1 (if for no other reason than to recover the default quartz-wm instead of tvwm, which was slow and crashy). It is fast -- I am so happy to finally be able to run envi and idl natively, instead of in classic (and I can return that stupid USB dongle at long last!)

Have you (Karl) or anyone else managed to access Aqua fonts yet via IDL? I was under the impression Apple was going to try to link the available Aqua fonts to X11, although this might be a pipe dream. It'll also be nice to see if they can modify the default color scheme of X11 to match Aqua...

--j

On 2/13/03 10:24 AM, in article
e6f1f318.0302131024.3287339e@posting.google.com, "Karl Schultz"
<kws@frii.com> wrote:

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Subject: Re: IDL demo bug in 5.6 on MAC OS 10.2. YES is is broken
Posted by [Richard French](#) on Sat, 15 Feb 2003 20:14:52 GMT
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I just upgraded from Apple's X11 0.1 to 0.2.1 and now it starts twm by default, I get a little right angle at the upper left of each window before it will actually open, and when I try to display a window in IDL, it is off the screen to the upper right on my dual displays. How the heck can I get quartz-wm to be my default window manager? I thought that would be the default, but evidently it isn't, perhaps because of something left over from the previous configuration. I'd be very grateful if you could tell me how to get quartz-wm to be the default wm. Thanks very much! Any other hints about using quartz-wm would be most welcome - thanks!
Dick

Subject: Re: IDL demo bug in 5.6 on MAC OS 10.2. YES is is broken
Posted by [Edd Edmondson](#) on Sat, 15 Feb 2003 21:04:36 GMT
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Richard G. French <rfrench@wellesley.edu> wrote:

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> using quartz-wm would be most welcome - thanks!
> Dick

Well, it's a bit off-topic, but open the Terminal and do
sudo emacs /etc/X11/xinit/xinitrc

and comment out the twm line by prefixing with a #
Also consider #ing out the xclock and xterm lines (except perhaps the last
one).

Finally add quartz-wm & too - the end of my file is:

start some nice programs

```
#twm &  
#xclock -geometry 50x50-1+1 &  
#xterm -geometry 80x50+494+51 &  
#xterm -geometry 80x20+494-0 &  
quartz-wm &  
exec xterm -geometry 80x25+0+0
```

--

Edd

Subject: Re: IDL demo bug in 5.6 on MAC OS 10.2. YES is is broken
Posted by [Karl Schultz](#) on Tue, 18 Feb 2003 20:51:20 GMT
[View Forum Message](#) <> [Reply to Message](#)

"Richard G. French" <rfrench@wellesley.edu> wrote in message
news:BA740A0E.21C%rfrench@wellesley.edu...

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Well, this problem gave major headaches to a LOT of people in 0.2. So,
Apple put out 0.2.1 a day or two later to address this issue. Sorry to see
that you have the same problem.

When I installed 0.2 to upgrade from 0.1, I essentially moved the old
release out of the way:

```
cd /etc
sudo mv X11 X11.beta1
cd /usr
sudo mv X11R6 X11R6.beta1
```

One could also move the X11.app file out of the way, although I forgot to do
so.

Then, installing the 0.2 version went well and I didn't have a twm problem.
I didn't mention this in my previous posting because I was hoping that 0.2.1
would obviate the need for these steps. But I tend to do stuff like this to
my system because I get nervous.

Even after installing 0.2.1, you could move those directories and reinstall
0.2.1 to get a clean install.

As Edd pointed out, you need to check any config files in your own
directory.

Finally, you could check the FAQ on the Apple web site for X11. The mailing
list archives are full of this sort of information, but you'd have to sort
through a week's worth of postings that have been accumulating at about
100-200 a day.

Anyway, I'd recommend the FAQ for this and other questions about X11 itself.

Karl
