Subject: Re: itools causing FC5 linux logout Posted by Karl Schultz on Fri, 01 Sep 2006 15:15:19 GMT

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On Thu, 31 Aug 2006 18:52:23 -0700, jesscobrien wrote:

> Hi,

>

- > I am having a problem with itools and other IDL guis on my laptop
- > running linux FC5 running gnome desktop.
- > uname -a
- > Linux nellie 2.6.17-1.2157 FC5 #1 Tue Jul 11 22:55:46 EDT 2006 i686
- > i686 i386 GNU/Linux

>

- > IDL> print,!version
- > { x86 linux unix linux 6.3 Mar 23 2006 32 64}

>

- > If I load an 2D image, even just 200x200 into an itool application I
- > get logged out of my gnome session. The same thing happened when I was
- > running earlier versions of the linux kernel, and I believe earlier
- > versions of IDL. Yesterday I noticed this also happening when I ran
- > XROI on an image that was rebinned to 321 x 159 pixels. Running itools
- > and XROI on a 2D array of this size causes me to be logged out about 2
- > out of 3 times small number stats as one stops tempting fate after a
- > while! Is this due to insufficient memory? I have 512MB of RAM and 1GB
- > of swap memory. Simple IDL GUIS like DIALOG PICKFILE dont cause a
- > problem. How much memory does one need to run more complex IDL GUIS
- > like XROI and itools?

>

- > Thanks,
- > Jess

I doubt that it is a memory problem. It is more likely that the X server is crashing due to an OpenGL problem. When you say "logged out of your gnome session", do you mean that the X server is crashing and getting restarted?

Try running XROI with the RENDERER keyword set to 1 and/or take whatever measures are necessary to force the use of the software renderer.

If that makes the problem go away, you may have a general OpenGL or X driver/configuration problem. You might try looking for updated drivers for your video card, etc.

Also, try running the standalone GL program 'glxgears' that should be in your distro. If that fails, then you surely have an OpenGL/X problem that you'll have to resolve.

Subject: Re: itools causing FC5 linux logout Posted by swisswuff on Thu, 07 Sep 2006 09:38:59 GMT View Forum Message <> Reply to Message

I have a similar problem. I use Suse Linux 10.1 and IDL 6.2, as well as IDL on OS X (G5 PPC). I would think that it is somewhat related to memory usage or maybe some memory leakage.

The problem occurs when I use xobjview to display some idlgrpolygon or idlgrvolume data.

Just trying IDL out on an Acer Veriton 3500 with an Intel i840 chipset, using hardware acceleration as option for xobjview, rendering and manipulation of the visualized data is without problem, but on closing out from xobjvew, I would typically experience a log-out from KDE already with moderate amounts of data (that shouldn't crash it). Using software rendering as option for xobjview, I can't even get xobjview up, but will have a log out of KDE before the data is visualized. These are incidents that do not occur with really minute amounts of data, so data size does seem to play a role. Visualizing a 512 x 512 x 10 voxel sample with 16bit-data will predictably crash out of Linux despite there being a 1.5GB RAM memory. The following IDL support trick does not work / remains without effect:

http://www.ittvis.com/services/techtip.asp?ttid=3524

Running IDL on a Powermac G5 under OS X / X11, the problem occurs slightly less frequently than that; there's an ATI graphics card installed there. So, with very large data, there's a slight risk of IDL crashing (not the X11 / OS X environment though) - particularly when using xobjview's "quit" menu command (rather than just closing the window).

Running IDL on my AMD Opteron workstation equipped with NVIDIA graphics card, the problem does not occur when I use xobjview to display really ample amounts of data in relation to the RAM available. I can really max out the system. However, when I display very large models (without being able to quantify it right now but close to the available limit in RAM), I occasionally get IDL to close out (but not KDE or any other window manager) - as under OSX, this happens mostly when I use the "quit" command of xobjview, but typically not when closing the window.

Previously, running IDL under OS 9, I would experience a build-up or accumulation of some type of memory overload: after 3-7

3D-visualizations with larger models, IDL would typically crash, or crash the whole machine.

We use other customized 3D software, where the manufacturer told us that they had the one or other un-understood crash with ATI cards, but not with NVIDIA cards. Maybe there are differences in the way 3D visualization is implemented and works? Maybe, all of the graphic cards use rather extensive simplification models, that may or may not work with IDL-generated data?

## Wolf Schweitzer

## Karl Schultz wrote:

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