Subject: Re: Graphics problem on Sun Ultra2 workstation
Posted by jimby on Wed, 30 Jul 2003 22:04:41 GMT
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Alex,

I've seen this problem before. You might want to examine your visual depth, resolution, and cycle rate. Try the following:

% xdpyinfo

which will give you a list of the various visuals available on your machine as well as the current one. I also assume you want to use 24 bit color depth.

Now try the m64config command under Solaris, but first read the manpage because this is a tricky command. The color flash is likely due to the number of cycles that your monitor is refreshing at. Look for a higher one (75 or 76 cycles).

After that, use the m64config to change your color depth and resolution.

% m64config -depth 24
% m64config -res 1280x1024x76 (or some resolution that is available to you)

Now log out of your X session and log back in. Note that this may affect some of your other applications if you were running in 8-bit Pseudocolor mode before.

Hope this helps.

Jim

Wonko@wonkology.org (Alex Schuster) wrote in message news:<8qsf3D1Pd8B@wonkology.org>...
> Hi there!
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> I've been away from this group for some time.. too many thing to do,
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Subject: Re: Graphics problem on Sun Ultra2 workstation
Posted by Timm Weitkamp on Thu, 31 Jul 2003 08:34:17 GMT
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I am pretty sure that this is simply the way that their 8-bit visuals deal with any application's attempt to allocate a larger number of colors than is left free by the other applications (including the window manager). In this case, the application gets a "private colormap", and every time the focus is put in the application's window, the entire screen switches to this colormap, inevitably messing up the rest of the screen. In other words: it's a feature, not a bug.

I'd be surprised if it had anything to do with the refreshing rate.

Alex, your Sun probably has Netscape installed, right? Try start it by typing "netscape -install". This forces Netscape to install a private colormap, and the Netscape window should then exhibit the same behavior as the IDL graphics window. The advantage is of course that Netscape or IDL can use the full 8-bit range of colors for themselves if they install a private colormap. A particularly smart program in this respect is Xfig, which switches to a private colormap during runtime as soon as the user

wants to use colors that are not available in the public colormap.

Can it be helped? I don't know. I used to live with it. Also, it usually
didn't occur if I avoided having other color-intensive applications
running when starting IDL.

Timm

Timm Weitkamp <http://people.web.psi.ch/weitkamp>

On 30.07.03 at 15:04 -0700, Jim Brauher wrote:

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Subject: Re: Graphics problem on Sun Ultra2 workstation
Posted by Karl Schultz on Thu, 31 Jul 2003 17:39:49 GMT
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"Timm Weitkamp" <timm.weitkamp@nowhere.edu> wrote in message
news:Pine.LNX.4.44.0307311024590.3502-100000@localhost.local domain...
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> to this colormap, inevitably messing up the rest of the screen. In other
> words: it's a feature, not a bug.

Agreed. This was just the way X chose to deal with the color allocation problem. Windows, by contrast, does dynamic palette remapping and also reserves some desktop colors so that the vital parts of the desktop like the window frames stay the same color.

> I'd be surprised if it had anything to do with the refreshing rate.

Agreed.

> Alex, your Sun probably has Netscape installed, right? Try start it by
> typing "netscape -install". This forces Netscape to install a private
> colormap, and the Netscape window should then exhibit the same behavior as
> the IDL graphics window. The advantage is of course that Netscape or IDL
> can use the full 8-bit range of colors for themselves if they install a
> private colormap.

This keeps Netscape from using up colors in the screen's default colormap, which will delay exhausting the free colors in this shared colormap. The downside is that when Netscape gets colormap focus, Netscape's colormap will get installed (loaded into the hardware's color table) and the other clients' colors will be false. Not a big problem, as long as you are aware of it.

> A particularly smart program in this respect is Xfig,
> which switches to a private colormap during runtime as soon as the user
> wants to use colors that are not available in the public colormap.

IDL's capabilities in this area are explained in the IDL documentation for the X device. The docs also explain the shared and private colormap issues pretty well. In general, IDL's WINDOW command gives the user a bit of control over how colors are allocated. Specifically, if you try to create a window with a lot of colors (COLORS keyword), IDL will use a private colormap if the colors cannot be allocated from the shared colormap.

> Can it be helped? I don't know. I used to live with it. Also, it usually
> didn't occur if I avoided having other color-intensive applications
> running when starting IDL.

One other culprit is the desktop itself. If you are running CDE, try adjusting the color usage settings in the desktop preferences. You can take it all the way down to just black and white, if you want. Sometimes, reducing the colors on the desktop can make a huge difference.

Some of our Sun machines have a client called xcmap that displays 256-color

PseudoColor colormap usage. It can help you see how many colors are being used. It is sort of fun to watch as you run clients that fool around with colors a lot.

Karl

>
> Timm
>
>
> Timm Weitkamp <http://people.web.psi.ch/weitkamp>
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Subject: Re: Graphics problem on Sun Ultra2 workstation
Posted by Wonko[3] on Thu, 14 Aug 2003 14:05:00 GMT
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timm.weitkamp@nowhere.edu (Timm Weitkamp) writes:

> Alex and Jim,

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> screen. In other words: it's a feature, not a bug.

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> Alex, your Sun probably has Netscape installed, right? Try start it by

Sort of, but the times whan I used SUNs to view Web sites are over, I prefer PCs for that now. Netscape is painfully slow, and crashes way too often. Mozilla is okay, but even slower.
I used to do the -install trick with Netscape some years ago, but my problem happens without any color-using applications. There is just OpenWindows running. I also tried CDE, even in black-white mode, but this dows not change the color flashing problem.

When I start Netscape, I can see true-color images. Using xcolor to display the colormap, I see no change here. I can also open another applicaton, using ~200 colors, without color flickering. But I can see the color map changing then.

There are a couple of SUNs here I am working with. Sparc5 machines, sparc10, and some Ultras. But only this Ultra-2 machines gives the problems. With all other machines I can prevent the flickering (if it happens at all) by doing a DEVICE, PSEUDO=8 or DEVICE, DECOMPOSED=0 before opening any graphics window.

But looking at the output of xdpyinfo, I just noted that the default visual ID is 0x20, and this means PseudoColor. Although there are a couple of TrueColor visuals. But this may be normal, I see a similar output on another Sun.

Oh, well. This is our biggest Sun, but I don't use it, because IDL (unless in read TrueColor mode) is no fun here.

Alex

--
Alex Schuster Wonko@wonkology.org PGP Key available
alex@pet.mpin-koeln.mpg.de