## Subject: Backing store issue Posted by Jonathan Joseph on Mon, 27 Mar 2006 18:56:08 GMT View Forum Message <> Reply to Message

I'm running IDL 6.2 on a SUN Blade 2000 running Solaris 8.0

I'm having a weird backing store problem. I have an application in which I sometimes display very large images (eg 23123 x 3193 pixels).

What I do is create a scrolled draw widget of the same size as the image and tv the image into that window. Then, I get to scroll around the image very rapidly without having to issue any commands to redraw the parts that become visible. It seems this should work fine as long as the video card has enough memory.

However, the behavoir I am seeing seems as though IDL thinks the video card has enough memory to handle the requests, when it really doesn't. Is there any way to check for this?

By default, I use RETAIN=2, so that IDL is doing the redrawing for me rather than the window manager (as this is usually less prone to problems).

I sometimes issue an explicit redraw command to redraw the entire image, when I have changed the stretch limits or something other display property of the image.

Under a certain size image, everything works fine. Unfortunately, when the images get to be larger than a certain size, the redrawing on scrolling often gives me garbage. There's got to be some tie-in with the graphics card, but I think there may also be a tie-in with IDL, since I'm using RETAIN=2.

## Symptoms:

RETAIN=0, initial visible portion draws correctly, scrolling just shows black everywhere else. If I scroll back to a place that was drawn fine before, it will be black. Doing an explicit redraw will redraw the visible portion. All this is as expected since I am not generating expose events.

RETAIN=1, initial visible portion draws correctly, scrolling shows black everywhere else. If I scroll back to a place that was drawn fine before, it will still look fine. Doing an explicit redraw will redraw the currently visible portion. Any portion that was visible during any redraw operation seems to stick around in the backing store, everywhere else is black.

RETAIN=2, initial visible portion looks like garbage. Scrolling

usually shows garbage. If you scroll slowly enough vertically (either up or down), the part of the image that scrolls into view will look OK. Scrolling horizontally will produce garbage regardless of the scrolling speed.

If I am running on the SUN, but displaying on my Windows laptop, everything works fine regardless of image size.

vedeo card on SUN Workstation: Sun XVR-1200 video card on my Windows box: NVIDIA GeForce4 4200 Go (Dell Mobile)

Any advice on how to figure out what's going on appreciated.

Thanks.

-Jonathan