Subject: Re: pixmap problem Posted by Steve Ready on Thu, 28 Aug 2003 18:47:04 GMT View Forum Message <> Reply to Message

I have replicated this with a Radion VE 32mb, Invidia GForce 64mb, and a Matrox 32mb under Win2k and XP. The maximum image size returned by the correct behavior for all these boards seems to scale loosely with the color resolution (16 versus 32 bit) coupled with the amount of card memory. It would be nice to have a better understanding of this and have IDL correctly report the limitiations.

I have reported this to RSI and here was their response:

We have no reason to believe that you are running into any issue other than the limits imposed by the Windows O.S. in its interface with your graphics card. One way to see this would be to try to make a bigger PIXMAP with the Windows Visual C++/MFC API. In both cases, you would want to make sure that both IDL and the MFC comparative program would have a "virgin" O.S. environment; that is, there would not be other applications running about in the background making demands on the video card memory. Consider that video card memory could get fragmented just like process memory.

IDL's WINDOWS, /PIXMAP call is making a basic call on the Win32 API pixmap library. I do not know the underlying source code for Microsoft's library, but it is very possible that that memory automatically makes a 3x or 4x pixmap-coordinates demand on the video card. Perhaps it does this only when your display is set to true color; you could test and see if setting your display to 256-colors provided you the bigger pixmap you want.

We would expect the larger memory video card to allow for a much larger maximum PIXMAP size, but, to be certain, you may need to consult with the video card vendor about what THEY think the maximum pixmap is that Windows can make on their card.

"Karl Schultz" <kschultz no spam@rsinc.com> wrote in message news:vksds6nnjrv1a@corp.supernews.com...

> This is a known problem, # 22066 should you call IDL tech support about it.

> There is no clear resolution to the problem, but it does appear to be pretty

> sensitive to the graphics card and/or driver software. On many machines,

- > the attempt to create a "too large" pixmap will fail and any pixmap that is
- > created successfully returns the correct data on a TVRD; this is the correct
- > behavior. However, several users have reported the same symptoms as you are
- > describing. If you can report what graphics hardware and driver software
- > (including version information) you are using, perhaps we can identify a
- > pattern. (And I suppose the canned response of "check your drivers for an
- > update" is a good thing to offer here as well.)

>

- > Another strange behavior on the failing hardware is that the ORDER keyword
- > can affect the pixmap size threshhold where the data is not read back
- > correctly via TVRD. IDL itself does not perform the "flip" as controlled by
- > ORDER. IDL instead modifies parameters to a WIN32 GDI call, thus making the
- > GDI or graphics driver perform the flip. A change in behavior like this is
- somewhat suggestive of a driver problem.
- > > Karl
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