Subject: Re: Q:IDL X windows error Posted by Liam Gumley on Mon, 10 Aug 1998 07:00:00 GMT View Forum Message <> Reply to Message

Rick Towler wrote:

- > I am running IDL v5.1 on HP-UX 10.2 at a screen depth of 8bpp and am
- > accessing it from a RedHat linux 5.1 box running at a screen depth of
- > 16bpp.

>

- > From within IDL I can not output anything do device "x" without
- receiving the following error:

- % Unsupported X Windows visual (class: StaticGray, depth: 0).
- Substituting default (class: <UndefinedVisual>, Depth: 0).
- % Execution halted at: \$MAIN\$

>

- > Does anyone have any experience with this error? I am guessing it stems
- > from the fact that locally I am at 16bpp while the remote machine can
- > only generate 8bpp. The easy answer would be to operate at 8bpp locally
- > but this is unacceptable since it will generate problems with other
- > applications. Is there another work-around?

Rick,

The situation with 16 bit color is explained in detail at http://www.rsinc.com/tipoweek/archive/color3.html

I've found the attached routine to be very useful in selecting an appropriate visual at IDL startup. I have the following as the first line in my startup file:

colorset, retain=2, decomposed=0

You may wish to use retain=0 if you use object graphics. My only other advice is to get rid of any IDL visual or color resource settings in your .Xdefaults file, and use the routine below instead.

Cheers.

Liam.

PRO COLORSET, RETAIN = RETAIN, DECOMPOSED = DECOMPOSED

;+ NAME: COLORSET PURPOSE: Select true color (24 bit) if available or pseudo color (8 bit)

```
visual
  consistently on X, Windows, and Macintosh.
 CATEGORY:
  Startup utilities.
 CALLING SEQUENCE:
  COLORSET
INPUTS:
  None
 OPTIONAL INPUTS:
  None
 KEYWORD PARAMETERS:
   RETAIN
               Specifies the default method used
           for backing store when creating new windows.
           0 => No backing store
           1 => Server or window system performs backing store
(DEFAULT)
           2 => Make IDL perform backing store
  DECOMPOSED
                    Specifies the the way in which graphics
           color index values are interpreted when using
displays with
           decomposed color (TrueColor or DirectColor visuals).
           0 = > Color indices given by single 8 bit values
(DEFAULT)
           1 = > Color indices given by three 8 bit values
 OUTPUTS:
  None
 OPTIONAL OUTPUTS:
  None
 COMMON BLOCKS:
  None
 SIDE EFFECTS:
  This routine changes the IDL visual for the rest of the IDL
session.
 RESTRICTIONS:
  Only affects X, WIN, and MAC displays.
  Only has an effect if run before any windows have been
  created, and if no DEVICE commands have been executed.
```

```
; EXAMPLE:
Execute the following command immediately after IDL startup (no
startup file)
:colorset
 MODIFICATION HISTORY:
  Written by: Liam.Gumley@ssec.wisc.edu
 $Id: colorset.pro,v 1.1 1998/06/17 19:37:17 gumley Exp $
 $Log: colorset.pro,v $
 Revision 1.1 1998/06/17 19:37:17 gumley
 Initial version
;- Check keywords
if n_elements( retain ) ne 1 then retain = 1
retain = (retain > 0) < 2
if n_elements( decomposed ) ne 1 then decomposed = 0
decomposed = (decomposed > 0) < 1
;- Windows case (visual cannot be changed)
if !d.name eq 'WIN' then $
 device, decomposed = decomposed, retain = retain
:- X and Macintosh case (will revert to 8 bit visual if 24 bit fails)
if !d.name eq 'X' or !d.name eq 'MAC' then $
 device, true color = 24, decomposed = decomposed, retain = retain
END
```

Subject: Re: Q:IDL X windows error Posted by Kevin Ivory on Mon, 10 Aug 1998 07:00:00 GMT View Forum Message <> Reply to Message

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- > from the fact that locally I am at 16bpp while the remote machine can
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- > but this is unacceptable since it will generate problems with other

I think IDL does not support 16 bpp in any Unix version, so you will definitely have to change to 8 bpp (with all color flashing problems etc.) or to 24 bpp. With most graphics cards & resolutions, if you can use 16 bpp, you can use 24 bpp as well. I use 16 bpp per default (because my 24 bpp X server has many bugs) - and when I need IDL graphics, I open another virtual terminal with 24 bpp with a command like (this is for Linux):

X -query localhost -bpp 24:1

IDL not supporting 16 bpp is *almost* a reason to dump it.

Kevin

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Kevin Ivory Tel: +49 5556 979 434

Max-Planck-Institut fuer Aeronomie Fax: +49 5556 979 240

Max-Planck-Str. 2 mailto:Kevin.lvory@linmpi.mpg.de

D-37191 Katlenburg-Lindau, GERMANY http://www.gwdg.de/~kivory2/