Subject: Re: problem loading color palette

Posted by Karl[1] on Thu, 27 Jul 2006 14:28:32 GMT

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This all seems to work fine for me on my ubuntu laptop with IDL 6.3.

All I had to do was:

device, decomposed=0 loadct, 1 tvscl, dist(400)

and I get a nice blue/white pattern. I don't get colormap flashing because this version of IDL selects the TrueColor visual by default. The window shows up in the upper-right corner of the screen, like it should. I don't know what is going on with your debian/icewm setup.

Using

device, /pseudo_color

is probably wrong.

Most X servers in the XFree86 / X.org lineage do not have PseudoColor visual support.

If I issue device, /pseudo_color device, /help

I get a message saying the PseudoColor is not supported and IDL is using the default TrueColor visual instead, which is quite correct.

Use xdpyinfo to learn what Visuals are supported on your X server.

I also strongly recommend reading the IDL documentation about the X device and/or contacting ITTVIS tech support for further assistance. A lot of the discussion here is in the IDL documentation.

Karl

aetherlux wrote:

- > I have found out that this solution doesn't work for Ubuntu. Instead.
- > if you X window system let it, you can try:
- >
- > device, /pseudo_color
- > device, decomposed=0
- > xloadct

```
>
> and then you can load your favourite palette.
> It has worked for a colleague using Ubuntu.
> aetherlux wrote:
>> Karl Schultz wrote:
>>> On Tue, 25 Jul 2006 03:57:47 -0700, aetherlux wrote:
>>>
>>>> Karl Schultz wrote:
>>>> On Mon, 24 Jul 2006 09:10:36 -0700, aetherlux wrote:
>>>> >
>>>> > Hi everybody, I use IDL 6.0 with Debian GNU/Linux. Today after trying
>>>> > to load a color palette to draw several maps, I have noticed that the
>>>> > palette is not loaded.
>>>> > I use:
>>>> > device, decomposed=0
>>>> > xloadct (and then I choose the palette or loadct, 41 -- the number of
>>>> > the palette)
>>>> >>
>>>> > It happens with all the palettes.
>>>> > I guess that it is related with the X server. Perhaps it is a
>>>> > consecuence of a recent update from Debian Sarge to Etch, which has
>>>> > changed my Xserver (in Sarge it was XFree86 and now in Etch is Xorg).
>>>> >>
>>>> > Does anybody know a solution to force IDL to load the palettes?
>>>> >
>>>> It really may be more of a function of your desktop software, especially
>>>> the window manager.
>>>> >
>>>> Term: ICCCM - Inter-client communications convention manual
>>>> IDL uses the ICCCM-compliant method of setting the colormap ID in the
>>>> top-level window. A ICCCM-compliant window manager is supposed to notice
>>>> this and make that colormap active (this is known as "installing" a
>>> > colormap) when the window receives colormap focus. The colormap focus
>>>> policy is often the same as pointer focus policy, but it also may be
>>>> different.
>>>> >
>>>> First, try just clicking or pointing at the window, to set focus on that
>>> window. If that does not work, investigate your window manager's colormap
>>>> focus capabilities and see if there is an option that you can adjust to
>>>> > make it work.
>>>> >
>>>> A lot of newer desktops and window managers steadfastly refuse to install
>>>> a different colormap on the server because it causes all the GUI elements
>>>> on the desktop to appear with "false colors". There is some debate over
>>>> the ICCCM and some desktops sort of "ignore" some parts of it.
>>>> >
```

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>>>> As a last resort, try the undocumented feature:
>>>> >
>>>> DEVICE, /INSTALL_COLORMAP
>>>> >
>>>> This makes IDL use the non-ICCCM-compliant method of installing the
>>>> colormap itself whenever the window gets focus.
>>>> >
>>>> You might also try using a TrueColor visual (DEVICE, TRUE_COLOR=24). But
>>>> I think this causes IDL to translate the colors through the palette on
>>>> the client side, which is not as fast.
>>>> >
>>>> > Hope this helps,
>>>> Karl
>>>>
>>>> I've tried it. I had seen about this in the ITT/RSINC web page. I am
>>> using IDL in two different laptops, the first with Ubuntu and Gnome and
>>>> the other with Debian and Icewm. In the Debian/icewm laptop when I run
>>>> the program first the new window appears almost out of the screen, to
>>>> the left of the screen.
>>>
>>> I don't know what might be causing this. I have a laptop with Ubuntu
>>> installed - maybe I'll see if I have the same problem.
>>>
>>> Are you using a virtual desktop that is larger than the physical screen?
>>> You also might submit this issue to ITTVIS Technical Support with all the
>>> supporting information. That way, you can be sure it will be
>>> investigated.
>>>
>>> Although I have tried to choose my palette, it has not been loaded and
>>>> the colors are from the default IDL palette. If I move the mouse pointer
>>>> to the window with the map (almost out of the screen) then the map
>>> colors change and it is showed with the right colors. By the way, the
>>> complete icewm desktop environment changes to awful and strange colors.
>>>
>>> That is exactly the expected behavior. This is all about the colormap
>>> installation process that I tried to explain above. You see, all but very
>>> expensive graphics systems have only one color table in its hardware. When
>>> an X client, like IDL, wants its own color table, it must share this
>>> hardware resource with other clients, including all the desktop crud. So,
>>> the window manager adjusts the contents of the hardware color table
>>> depending on which client has the focus. If you don't buy my explanation,
>>> then read some material about X Windows. These issues are fairly well
>>> known and understood.
>>>
>>> Again, this "colormap flashing" issue is regarded as pretty distasteful in
>>> the Linux community. One approach to avoiding it is using the TrueColor
>>> visual. More recent versions of IDL now try to use a TrueColor visual
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>>> before DirectColor by default for this very reason. You can explicitly
>>> request this behavior by using "DEVICE, TRUE_COLOR=24" before issuing any
>>> graphics commands. I think you'll be much happier if you do this.
>>>
>>>> I have a bigger problem, now the image is showed with right colors, but
>>>> the my output file with this map in yet saved with the default colors.
>>>
>>> Sorry, I don't know what you mean by "output file". You'll need to say
>>> how you created it.
>>>
>>> Karl
>>
>> I have got to solve the problem. It works fine but yet with the window
>> placed to the left of the screen.
>> Before issuing any graphics command:
>>
>> device, /install colormap
>> device, true_color=24
>> device, decomposed=0
>> xloadct
>>
>> now you can choose your favourite palette.
>>
>> About the "output file": I write a tiff file to disk to save the
>> obtained graphic:
>>
>> myfile='/home/user/map.tif'
>> write_tiff,myfile,map,4
>>
>> Thank you very much everybody.
```