
Subject: Re: PRINTER device changed in IDL 6
Posted by [Kenneth P. Bowman](#) on Sat, 28 Feb 2004 20:04:14 GMT
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In article <MPG.1aaa7530922b1c3f9896ba@news.frii.com>,
David Fanning <david@dfanning.com> wrote:

```
> PRO Test
>   thisDevice = !D.Name
>   Set_Plot, 'PRINTER'
>   TVLCT, 255, 255, 0, 200
>   Set_Plot, thisDevice
> END
```

I don't have any problems running this program (renamed test_printer)
multiple times under OS X.

```
csrp3> idl
IDL Version 6.0, Mac OS X (darwin ppc m32). (c) 2003, Research Systems,
Inc.
Installation number: 8233-12-6.
Licensed for use by: DEPARTMENT OF METEOROLOGY
```

```
% Compiled module: MAKE_PATH.
IDL> test_printer
% Compiled module: TEST_PRINTER.
IDL> test_printer
IDL> test_printer
```

Ken

Subject: Re: PRINTER device changed in IDL 6
Posted by [Craig Markwardt](#) on Mon, 01 Mar 2004 09:19:07 GMT
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David Fanning <david@dfanning.com> writes:

```
> Folks,
>
> I have been getting odd e-mail from folks complaining about
> programs that have been working for years. I've traced it
> back to an unannounced change in the PRINTER device in IDL 6.0.
> I'm trying now to see how widespread this phenomenon is before
> I report the problem to RSI.
>
> Here is the test program:
...
```

> Oddly, this program does not cause an error the FIRST time
> it is run in a new IDL session, only on subsequent times!!
> Very strange.

Works fine running multiple times on Linux.

```
IDL> print, !version  
{ x86 linux unix linux 6.0 Jun 27 2003    32    64}  
IDL> test  
IDL> test  
IDL> test  
IDL>
```

Craig

Subject: Re: PRINTER device changed in IDL 6
Posted by [David Fanning](#) on Mon, 01 Mar 2004 19:13:11 GMT
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David Fanning writes:

> Here is the test program:
>
> PRO Test
> thisDevice = !D.Name
> Set_Plot, 'PRINTER'
> TVLCT, 255, 255, 0, 200
> Set_Plot, thisDevice
> END
>
> This code runs fine in all versions of IDL prior to 6.0.
> But it fails in 6.0 (on both my Windows machines, at least)
> with the following error:
>
> % TVLCT: Error creating device colortable.
>
> Oddly, this program does not cause an error the FIRST time
> it is run in a new IDL session, only on subsequent times!!

I was wrong about it running in earlier versions of IDL.
It fails reliably in all of them if you run the program
enough times (2).

According to RSI this is listed as a known "defect",
but I am apparently the first person in recorded history
to run into it in practice. Not much motivation to get to
the bottom of it, as I understand it, unless more people

complain. I guess I'm talking to all three of you who have downloaded the programs that go with my book. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: PRINTER device changed in IDL 6
Posted by [R.G. Stockwell](#) on Mon, 01 Mar 2004 19:40:47 GMT
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"David Fanning" <david@dfanning.com> wrote in message news:MPG.1aad3936a81870259896bf@news.frii.com...

> David Fanning writes:

>

>> Here is the test program:

>>

>> PRO Test

>> thisDevice = !D.Name

>> Set_Plot, 'PRINTER'

>> TVLCT, 255, 255, 0, 200

>> Set_Plot, thisDevice

>> END

I see the error too (IDL 6 - Win), and in fact TVLCT is always broken after this call, even if I'm in my 'win' device. I have to reenter IDL to be able to use it.

Perhaps (or more likely certainly) I am missing the point, but why load colours inside the Printer device? I have always loaded the colors I want before I set the set_plot device (usually because I load my very pretty colors in my startup file, and I almost never change them). Simply reversing the order of the two calls (tvscf and set_plot) makes the error go away.

Cheers,
bob

Subject: Re: PRINTER device changed in IDL 6
Posted by [David Fanning](#) on Mon, 01 Mar 2004 20:04:17 GMT
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R.G. Stockwell writes:

- > Perhaps (or more likely certainly) I am missing the point, but why load colours inside the
- > Printer device? I have always loaded the colors I want before I set the
- > set_plot device (usually because I load my very pretty colors in my startup file, and I
- > almost never change them). Simply reversing the order of the two calls (tvscl and set_plot)
- > makes the error go away.

Well, 16.7 million colors to choose from, some of us are just not happy with 256, no matter how pretty they are. :-)

No, I'm kidding. This comes up for me because I try to write programs that are device independent. That is to say, they work the same way (use the same colors, lay out their graphics in the same place, align their fonts in the same way, etc.) no matter what graphics output device they happen to find themselves running on. In practice I only care about these: X, WIN, Z, PS, PRINTER. But even that is challenge enough to cause me to break out in cold sweats in the middle of the night. (Throw in MAC and I shake so much I pretty much can't even serve in tennis.)

But the point is, I try to make these programs self-contained and smart. In the business I'm in, I can't ever rely on the environment being set up like mine (or even set up properly according to my instructions, but that's for another day). I *have* to load colors inside my programs if I expect them to work properly. So, as you can see, it's a bit of a problem.

At the moment I am working around this problem by "protecting" TVLCT commands like this:

```
IF !D.Name EQ 'PRINTER' THEN BEGIN
  Set_Plot, 'Z', /Copy
  TVLCT, theColor, theIndex
  Set_Plot, 'PRINTER', /Copy
ENDIF ELSE TVLCT, theColor, theIndex
```

But that seems like a lot of fluff for a single TVLCT command!

Maybe I'll just follow the same path I used when I had to write 25 lines of code every time I wanted to use a TV command, and just write my own color loading routine. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting

Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
