
Subject: Re: Bug in the IDL8.1 VECTOR function ?
Posted by [David Fanning](#) on Thu, 05 May 2011 15:32:52 GMT
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Laurent Testut writes:

- > I fought all the day to try to draw a vector field with the new IDL8.1 *VECTOR* and I realized that there is a bug in this function. If you use the example provided in the doc (see below), the window appears well and if you click then IDL simply crash !
- > Is this bug specific to my config IDL8.1 on OpenSuse 11.3 or it is an intrinsic to VECTOR ?

It doesn't crash my Windows 7 64-bit machine.

Have you tried this with software rendering turned on?
Many LINUX problems with object graphics are due to problems in the hardware OpenGL driver.

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Bug in the IDL8.1 VECTOR function ?
Posted by [Laurent Testut](#) on Thu, 05 May 2011 18:25:09 GMT
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- > Have you tried this with software rendering turned on?
- > Many LINUX problems with object graphics are due to
- > problems in the hardware OpenGL driver.
- >

Thanks David but what do you call software rendering turned on?
Anyway I've a double boot so tomorrow I will try to crash my windows
IDL !
Cheers,
Laurent

Subject: Re: Bug in the IDL8.1 VECTOR function ?
Posted by [David Fanning](#) on Thu, 05 May 2011 18:56:46 GMT

Laurent Testut writes:

- > Thanks David but what do you call software rendering turned on?
- > Anyway I've a double boot so tomorrow I will try to crash my windows
- > IDL !

Object graphics commands can be rendered using the OpenGL libraries build into your graphics card (hardware rendering) or using the OpenGL Mesa Library that is distributed with IDL (software rendering). Hardware rendering is the preferred (and default) choice, since graphics cards will typically implement some kind of hardware acceleration process that will make the rendering faster (MUCH faster, in some cases) than software rendering.

But, you can choose which of these options you want. You can choose it at the window level with the `RENDERER` keyword to an `IDLgrWindow` or draw widget object, or you can choose it at the system level using some preference that I can never remember and can never find. (Maybe someone will remind both of us.) In the Workbench, you choose the IDL preferences and the Graphics tab. You will find a switch there.

Many, many problems in object graphics display are caused by lousy OpenGL libraries on graphics cards. So ANY time you have a problem with object graphics output, you test it with software rendering so you can be sure to know who you should be complaining to. Not that it makes all that much difference. No one's going to do anything for you, except to remind you to go get the latest drivers for your graphics display card. Something you are doing routinely anyway, right?

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Bug in the IDL8.1 VECTOR function ?

On 5/5/11 12:56 PM, David Fanning wrote:

> Laurent Testut writes:

>

>> Thanks David but what do you call software rendering turned on?

>> Anyway I've a double boot so tomorrow I will try to crash my windows

>> IDL !

>

> Object graphics commands can be rendered using the

> OpenGL libraries build into your graphics card

> (hardware rendering) or using the OpenGL Mesa

> Library that is distributed with IDL (software

> rendering). Hardware rendering is the preferred

> (and default) choice, since graphics cards will

> typically implement some kind of hardware acceleration

> process that will make the rendering faster (MUCH faster,

> in some cases) than software rendering.

>

> But, you can choose which of these options you

> want. You can choose it at the window level with

> the RENDERER keyword to an IDLgrWindow or draw widget

> object, or you can choose it at the system level using

> some preference that I can never remember and can never

> find. (Maybe someone will remind both of us.) In the

> Workbench, you choose the IDL preferences and the

> Graphics tab. You will find a switch there.

IDL_GR_X_RENDERER on Unix systems, IDL_GR_WIN_RENDERER on Windows

For example, to set software rendering as the default for all object graphics windows:

```
IDL> pref_set, 'IDL_GR_X_RENDERER', 1, /commit
```

> Many, many problems in object graphics display are caused

> by lousy OpenGL libraries on graphics cards. So ANY time

> you have a problem with object graphics output, you test

> it with software rendering so you can be sure to know who

> you should be complaining to. Not that it makes all that

> much difference. No one's going to do anything for you, except to

> remind you to go get the latest drivers for your graphics

> display card. Something you are doing routinely anyway, right?

>

> Cheers,

>

> David

>

Mike

--

Michael Galloy

www.michaelgalloy.com

Modern IDL, A Guide to Learning IDL: <http://modernidl.idldev.com>

Research Mathematician

Tech-X Corporation

Subject: Re: Bug in the IDL8.1 VECTOR function ?

Posted by [penteado](#) on Thu, 05 May 2011 19:49:30 GMT

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On May 5, 3:56 pm, David Fanning <n...@idlcoyote.com> wrote:

- > Many, many problems in object graphics display are caused
- > by lousy OpenGL libraries on graphics cards. So ANY time
- > you have a problem with object graphics output, you test
- > it with software rendering so you can be sure to know who
- > you should be complaining to. Not that it makes all that
- > much difference. No one's going to do anything for you, except to
- > remind you to go get the latest drivers for your graphics
- > display card. Something you are doing routinely anyway, right?

Then there is the stuff that gets broken in software rendering:

http://groups.google.com/group/comp.lang.idl-pvwave/browse_thread/thread/1a150afc3bc5bb22/

Subject: Re: Bug in the IDL8.1 VECTOR function ?

Posted by [Laurent Testut](#) on Fri, 06 May 2011 12:01:43 GMT

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Hi all,

Many thanks for your help but my problem is not really solved

1) David you were right it is a OS dependant problem since I faced no problem with my windows XP IDL8.1

2) I've change on my Linux (OPENSUSE) the rendering following Michael (pref_set, 'IDL_GR_X_RENDERER', 1, /commit) or the equivalent David's suggestion (IDL_preference/graphic tab) then I have a new problem

IDL > pref_set, 'IDL_GR_X_RENDERER', 0, /commit

execute the documentation vector code

==> same problem as before (plot seems right but any clic on the

window automatically crash IDL)

```
IDL > pref_set, 'IDL_GR_X_RENDERER', 1, /commit
```

execute the documentation vector code

==> new problem (open an empty window and tell me :

% Loaded DLM: XML.

% IDLITWINDOW::ONEXPOSE: Failure to acquire window rendering context.

% Unable to acquire device context.

% Execution halted at: \$MAIN\$

% Loaded DLM: SHAPEFILE.

% Unable to invoke method on NULL object reference: <OBJREF
(<NullObject>)>.

% Execution halted at: \$MAIN\$

% VECTOR: Object reference type required in this context: ODS.

% Execution halted at: \$MAIN\$

I've test with IDL8.0 and IDL 8.1 idem !

Any idea ?

Thanks,

Laurent

Subject: Re: Bug in the IDL8.1 VECTOR function ?

Posted by [penteado](#) on Fri, 06 May 2011 12:31:46 GMT

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On May 6, 9:01 am, Laurent Testut <laurent.tes...@gmail.com> wrote:

> ==> new problem (open an empty window and tell me :

> % Loaded DLM: XML.

> % IDLITWINDOW::ONEXPOSE: Failure to acquire window rendering context.

> % Unable to acquire device context.

> % Execution halted at: \$MAIN\$

> % Loaded DLM: SHAPEFILE.

> % Unable to invoke method on NULL object reference: <OBJREF
> (<NullObject>)>.

> % Execution halted at: \$MAIN\$

> % VECTOR: Object reference type required in this context: ODS.

> % Execution halted at: \$MAIN\$

Old known bug, with no indication that will get fixed. See my last post on

http://groups.google.com/group/comp.lang.idl-pvwave/browse_t

Subject: Re: Bug in the IDL8.1 VECTOR function ?
Posted by [David Fanning](#) on Fri, 06 May 2011 12:34:31 GMT
[View Forum Message](#) <> [Reply to Message](#)

Laurent Testut writes:

```
> ==> new problem (open an empty window and tell me :  
> % Loaded DLM: XML.  
> % IDLITWINDOW::ONEXPOSE: Failure to acquire window rendering context.  
> % Unable to acquire device context.  
> % Execution halted at: $MAIN$  
> % Loaded DLM: SHAPEFILE.  
> % Unable to invoke method on NULL object reference: <OBJREF  
> (<NullObject>)>.  
> % Execution halted at: $MAIN$  
> % VECTOR: Object reference type required in this context: ODS.  
> % Execution halted at: $MAIN$  
>  
>  
> I've test with IDL8.0 and IDL 8.1 idem !  
>  
> Any idea ?
```

I think now you are probably experiencing one of the great joys of open source software. :-)

Don't know, but I doubt IDL is at fault here. Sorry.
Maybe one of the LINUX guys can help.

Cheers,

David

--

David Fanning, Ph.D.
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