
Subject: IDL Object Graphics Update

Posted by [davidf](#) on Mon, 18 May 1998 07:00:00 GMT

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Hi Folks,

I wrote last Friday about some of my object graphics programs:

```
> I don't want to rain on the IDL 5.1 parade (because I like
> it too), but I have noticed that almost all of my object
> graphics programs are broken. :-(
>
> Here is a simple program that illustrates the problem. This
> program runs in IDL 5.0.3 and fails in IDL 5.1.
>
> pro test
>   thisView = OBJ_NEW('IDLgrView')
>   thisModel = OBJ_NEW('IDLgrModel')
>   thisView->Add, thisModel
>   thisSurface = Obj_New("IDLgrSurface")
>   thisModel->Add, thisSurface
>   thisContainer = Obj_New('IDLgrContainer')
>
>   ; The next line causes the following error:
>   ;
>   ; % IDLGRCONTAINER::ADD: Objects can only have one
>   ; parent at a time: <ObjHeapVar10(IDLGRSURFACE)>
>
>   thisContainer->Add, thisSurface
> end
```

Although RSI technical support tells me this is a bug, I suspected otherwise. Today well placed sources at RSI confirm my suspicions that this is NOT a bug, but is how IDL works currently and for what I think is a valid reason: If the same graphics primitive belonged, for example, to two different models there could be some confusion about its current geometry. IDL version 5.1 has simply enforced parenting rules that were loosely applied in IDL 5.0.3.

Two workarounds are suggested. First, it is suggested that I use an IDL_Container object instead of the IDLgrContainer object. The former does no class checking and so will allow pretty much anything to be put into it.

Wanting to understand this a bit more, I started to look at the on-line documentation for IDL_Container and IDLgrContainer. Oddly, there is NO documentation for IDLgrContainer at all

in the IDL 5.1 on-line help or in the slim volume of documentation shipped with 5.1. I can only conclude that there is a bit of revisionist history going on here, because clearly IDLgrContainer has disappeared without a trace and it appears RSI wants it that way. (Reminds me of some thoughts I had about one of my old girl friends.) I recommend you find all references to IDLgrContainer in your code and change it to IDL_Container.

The second workaround is to use an IDLgrViewgroup object, a new object class that is an IDL_Container subclass. Viewgroup objects are different from Scene objects, apparently (I am reading between the lines somewhat here, trying to piece together various documentation fragments), in that they can contain objects that do not themselves have DRAW methods. Thus, I can add, for example, Text objects to a Viewgroup object in addition to Axis objects.

In any case, I've fixed the object graphics programs that are available on my web page and from my anonymous ftp site. If any of you have downloaded these programs, you may want to check back for the updates.

I am currently working on a short book explaining how to write object programs in IDL and how to use the object graphics system. If anyone has any interesting tidbits to report I would like to hear about them so I can add them to this reference material.

Cheers,

David

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