Subject: Re: Object Graphics: Black Box Posted by Rick Towler on Thu, 23 Aug 2001 19:39:22 GMT View Forum Message <> Reply to Message

Hi Adam,

First off, I should probably do the requisite scolding for using COMMON blocks. So there, you have been scolded.

> oScene = obj_new('IDLgrScene')

You don't need the scene. Remove it and just draw the view. KISS.

- > olmageView = obj_new('IDLgrView', LOCATION=[-64,-64],
- > DIMENSIONS=[128,128], \$
- > VIEWPLANE_RECT=[-1,-1,2,2], ZCLIP=[1, -1])

I think you are confusing some of the View object's keywords. LOCATION determines the lower left hand point where the view will be projected in the 2d window (your oWindow) and DIMENSIONS specifies the width and height of this projection. These settings are akin to your monitors position and size settings where you can shrink or expand your desktop to fill the entire screen or just some part of it. Unless you want to project 2 or more views into a single window the default values are fine.

Your real problem is with your VIEWPLANE_RECT. How big is the image you are trying to display? Your view volume is set up to display a 2 pixel x 2 pixel image and since your image's coordinates run from 0 to n you will only see 1 of these pixels. You have two options, scale your image data to a range of 0..1 or better yet, enlarge your view volume to accommodate your entire image:

example for a 256x256 pixel image:

olmageView = obj_new('IDLgrView', VIEWPLANE_RECT=[0,0,256,256])

Give that a try. I think it should do the trick.

-Rick Towler

"Adam Rankin" <arankin@irus.rri.on.ca> wrote in message

```
news:Pine.SUN.4.30.0108231327590.1754-100001@proxima.irus.rr i.on.ca...
> Hey guys,
> A fun one to throw at you...
> I load a widget_draw and give it the GRAPHICS_LEVEL=2 keyword...
> I make an IDLgrImage,IDLgrModel,IDLgrView and a IDLgrScene
> and add them appropriately using data retrieved by READ_DICOM
> (I tested the data with TVSCL and it works)
> but when I load it into this draw widget all that appears is a black box!
>
> Any suggestions?
> Also, I have been having trouble with my display so If anyone sees a
> normal image just say so and I'll kick my computer. =)
> Code:
 PRO loadimages, Ev
> COMMON graphics, ptrGraphStruct
> COMMON display, oWindow
> oPalette = obi_new('IDLgrPalette')
> oPalette -> LoadCT, 5
> oScene = obj_new('IDLgrScene')
> olmageView = obi_new('IDLgrView', LOCATION=[-64,-64],
> DIMENSIONS=[128,128], $
> VIEWPLANE RECT=[-1,-1,2,2], ZCLIP=[1, -1])
> olmageModel = obj_new('IDLgrModel', LIGHTING=2)
>
> image =
READ_DICOM('/home/irus/arankin/mrctbunny010523/2001may23/s27 _b1_TR1500/MR1.d
cm')
 olmage = obj_new('IDLgrImage', image, PALETTE=oPalette)
>
> olmageModel -> Add, olmage
> olmageView -> Add, olmageModel
> oScene -> Add, oImageView
> ;create and load the new image(s)
> WIDGET_CONTROL, (*ptrGraphStruct).draw, GET_VALUE=oWindow
> oWindow -> SetProperty, GRAPHICS_TREE=oImageView
> oWindow -> Draw, oScene
> ;clear out the crap that is no longer needed
```

```
> OBJ_DESTROY, oScene
 OBJ_DESTROY, oPalette
> ;make sure that everyone knows that the draw's are now drawn.
 (*ptrGraphStruct).drawFlag='1'
> END
> ;this simple procedure quits the application by calling /DESTROY to widget
> control
**
> PRO quit, ev
> COMMON graphics, ptrGraphStruct
> COMMON display, oWindow
;clear out that stuff
> OBJ_DESTROY, oWindow
> PTR_FREE, ptrGraphStruct
> WIDGET_CONTROL, Ev.top, /DESTROY
> END
> ;this is the main procedure, it loads the widgets and draws the
> application
> PRO multidisplay, Ev
> ;pass the common block
> COMMON graphics, ptrGraphStruct
> topBase = WIDGET_BASE(Title='Multiple Displays', /COLUMN,
> MBAR=bar)
> subBase = WIDGET_BASE(topBase, XSIZE=1024, YSIZE=425, /COLUMN)
> fileMenu = WIDGET BUTTON(bar, /MENU, value='File')
> loadButtonMenu = WIDGET BUTTON(fileMenu, Value='Load Images',
```

```
> EVENT_PRO='loadimages')
> quitButtonMenu = WIDGET_BUTTON(fileMenu, Value='Quit',
> EVENT_PRO='quit')
>
> draw = WIDGET_DRAW(subBase, GRAPHICS_LEVEL=2, XSIZE=1024,
> YSIZE=400)
>
> ;first time through, and their are no images so set flag to 0
> drawFlag='0'
>
> ;make a structure with all the widgets and pass the pointer
> graphStruct = {topBase:topBase, subBase: subBase, draw:draw,
> drawFlag:drawFlag}
> ptrGraphStruct = PTR_NEW(graphStruct)
>
>
  WIDGET_CONTROL, topBase, /REALIZE
   XMANAGER, 'multidisplay', topBase
>
>
> END
> -Adam
>
```