
Subject: Re: programming with itools

Posted by [Michael Galloy](#) on Fri, 26 Jun 2009 17:47:33 GMT

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Anne Martel wrote:

> I've finally decided to try to figure out how to use iTools and with
> the help of the examples on michael galloys page, searching through
> code in the idl distribution and a lot of trial and error I have
> managed to setup a viewer with 2 windows, one showing a volume and the
> other showing a slice through the volume.

>

> I am stuck on a couple of things (well more than a couple but this is
> my immediate problem)and was hoping that the solutions are obvious to
> people who have played with itools more than I have:

>

> a) why does the line

> oimplane -> setproperty, orientation = 'Z'

> not have any impact on the orientation - it always sets to the default

> x orientation?

>

> b) is there any way of setting the 2nd viewport to iimage, ie no axes
> or rotations

>

> The procedure I have so far is:

>

> ivolume,/test,view_grid=[2,1]

> id = itGetCurrent(tool=otool)

> vol_id = otool->findIdentifiers('*data_space/volume', \$

> /visualizations)

> ovol = otool->getByIdentifier(vol_id)

>

> ;this bit sets up an image plane

> ops_id = otool->findIdentifiers('*imageplane*', /operations)

> oimplane = otool->getByIdentifier(ops_id)

> ;this next line doesn't do anything!

> oimplane -> setproperty, orientation = 'Z'

> result = otool->doAction(ops_id)

>

> ;now grap the data for the image plane

> oSelVis = oTool->GetSelectedItems(count=nSelVis)

> oData = oSelVis->GetParameter('IMAGEPIXELS')

> strToolID = IDLitSys_CreateTool('Image Tool',/view_next,initial_data =

> oData, visualization_type='IDLIMAGE')

> oNewTool = oTool->GetByIdentifier(strToolID)

> oCreateVis = oNewTool->GetService('CREATE_VISUALIZATION')

> oParmSet = OBJ_NEW('IDLitParameterSet', \$

> DESCRIPTION='Image Plane', NAME='Image Plane',\$

> TYPE='Image', ICON='image')

```
> ; hook up the plane data
> oParmSet->Add, oData, PARAMETER_NAME='IMAGEPIXELS', /
> PRESERVE_LOCATION
> oCommandSet = oCreateVis->CreateVisualization(oParmSet, "IMAGE")
> ; amazingly the plane image updates when the volume plane is moved!
>
> any suggestions gratefully received,
> Anne
```

Try this:

```
ivolume, /test, view_grid=[2, 1]
id = itGetCurrent(tool=otool)
vol_id = otool->findIdentifiers('*data_space/volume', /visualizations)
ovol = otool->getByIdentifier(vol_id)
```

```
; this bit sets up an image plane
ops_id = otool->findIdentifiers('*imageplane*', /operations)
```

```
result = otool->doAction(ops_id)
planeId = otool->findIdentifiers('*image plane*', /vis)
oimplane = otool->getByIdentifier(planeId)
oimplane->setProperty, orientation=2
```

```
; now grab the data for the image plane
oSelVis = oTool->GetSelectedItems(count=nSelVis)
oData = oSelVis->GetParameter('IMAGEPIXELS')
strToolID = IDLitSys_CreateTool('Image Tool', /view_next,
initial_data=oData, $
                        visualization_type='IMAGE')
oNewTool = oTool->GetByIdentifier(strToolID)
oCreateVis = oNewTool->GetService("CREATE_VISUALIZATION")
oParmSet = OBJ_NEW('IDLitParameterSet', $
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```
; hook up the plane data
oParmSet->Add, oData, PARAMETER_NAME='IMAGEPIXELS', /PRESERVE_LOCATION
oCommandSet = oCreateVis->CreateVisualization(oParmSet, 'IMAGE')
```

Mike

--

www.michaelgalloy.com
Associate Research Scientist
Tech-X Corporation

Subject: Re: programming with itools

Posted by [Michael Galloy](#) on Fri, 26 Jun 2009 18:16:47 GMT

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mgalloy wrote:

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> oCommandSet = oCreateVis->CreateVisualization(oParmSet, 'IMAGE')
>
> Mike

```

And a bit more cleaned up...

```

ivolume, /test, view_grid=[2, 1]
toolId = itGetCurrent(tool=tool)

; this bit sets up an image plane

```

```
opImagePlaneId = tool->findIdentifiers('*imageplane*', /operations)
result = tool->doAction(opImagePlaneId)
```

```
planeId = tool->findIdentifiers('*image plane*', /visualizations)
result = tool->doSetProperty(planeId, 'orientation', 2)
```

```
; now grab the data for the image plane
selectedItems = tool->getSelectedItems(count=nSelectedItems)
data = selectedItems->getParameter('IMAGEPIXELS')
toolId = IDLitSys_CreateTool('Image Tool', /view_next, initial_data=data, $
                             visualization_type='IMAGE')
```

Mike

--

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