
Subject: Re: IVolume/isosurface

Posted by [Kenneth P. Bowman](#) on Thu, 06 Jul 2006 23:30:39 GMT

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In article <12ar2fms945fc42@corp.supernews.com>,
"Karl Schultz" <k_remove_schultz@ittvis.com> wrote:

>> Can an IVolume display more than one isosurface? If not, why not?
>>
>
> You need to re-select the volume to add another Isosurface.

OK, I can do that interactively, but I am trying to do this programmatically, as follows.

Being a novice object graphics user, I expect the code is ugly, but it works for a single isovalue. However, when isovalues is an array, only one surface is displayed. Printing isosurface_id shows two isosurfaces, but the second does not appear in the display.

Confusedly (but what else is new),

Ken

```
IVOLUME, var, /NO_SAVEPROMPT, OVERPLOT = itool_id
```

```
vol_id = itool_obj -> FindIdentifiers('*DATA SPACE/VOLUME*', /VISUALIZATIONS)      ;Get  
volume viz object identifier  
vol_obj = itool_obj -> GetByIdentifier(vol_id)                                     ;Get volume viz object  
reference  
vol_obj -> SetProperty, RENDER_EXTENTS = 0                                       ;Turn off walls  
vol_obj -> SetProperty, HIDE = 1                                                  ;Hide volume (for exporting  
images)
```

```
isosurface_op_id = itool_obj -> FindIdentifiers('*ISOSURFACE*', /OPERATIONS)      ;Get  
isosurface operator identifier  
isosurface_op_obj = itool_obj -> GetByIdentifier(isosurface_op_id)                 ;Get isosurface  
operator object reference  
isosurface_op_obj -> SetProperty, SHOW_EXECUTION_UI = 0                          ;Turn off  
isosurface operator user interface  
FOR i = 0, N_ELEMENTS(isovalues)-1 DO BEGIN  
  isosurface_op_obj -> SetProperty, _ISOVALUE0 = isovalues[i]                    ;Set isosurface  
value to pv_value  
  rc = itool_obj -> DoAction(isosurface_op_id)                                  ;Make isosurface  
ENDFOR
```

```
isosurface_id = itool_obj -> FindIdentifiers('*DATA SPACE/ISOSURFACE*', /VISUALIZATIONS)  
;Get isosurface object identifier(s)  
PRINT, isosurface_id
```

```

FOR i = 0, N_ELEMENTS(isovalues)-1 DO BEGIN
    isosurface_obj = itool_obj -> GetByIdentifier(isosurface_id[i])           ;Get isosurface
object reference
    isosurface_obj -> SetProperty, SOURCE_COLOR = 1, $                       ;Set color
source to "user"
        FILL_COLOR = isocolor, $                                           ;Set color
        TRANSPARENCY = 20                                                  ;Set transparency
    itool_obj -> RefreshCurrentWindow                                       ;Refresh window
    iTPropertyReport, itool_obj, isosurface_id[i]                         ;Print list of isosurface
properties
ENDFOR

```
