
Subject: grROI Style and anROI Type

Posted by [Dan Carreira](#) on Fri, 25 Apr 2003 21:26:03 GMT

[View Forum Message](#) <> [Reply to Message](#)

Hi all,

I'm new (2 months) to IDL and have been reading through a lot of the older posts in an attempt to absorb every little tidbit of information that I can and I just wanted to say thanks before I jump into my question.

So Thanks.

Now my question.

I'm writing an application that creates and modifies ROI's through mouse interaction.

My application currently allows the user to define 2 ROI's (ROI & CutAddROI) and a seed point. The user defines the ROI and can then select an "add tool" which allows them to create another ROI which I call CutAddROI. The seed point will later be used to identify which part of ROI I want to keep when I cut a section off of ROI.

When generating masks of the ROI's I'm running into a problem.

ROI is and always will be a closed polyline in my application. So the mask is generated exactly the way I need it. If I draw it in the shape of a U it closes the top when it generates the boundary of the ROI.

CutAddROI can be an open polyline or if the user wants can close it by drawing it that way using the mouse. If I draw a U then I want the top of the U open when I generate the boundary of the region. My problem is that when I generate the mask for CutAddROI it always generates it as if it was a closed polyline, essentially closing the top of the U in the boundary mask.

I've tried changing the Style of the CutAddROI but nothing changes as far as the Mask is concerned.

I also noticed that the grROI and anROI Init methods have different keywords for almost identical variables grROI has STYLE and anROI has TYPE. Why are they different and will changing my IDLgrROI CutAddROI to an IDLanROI fix my problem?

Here's a code snippet in case anyone's interested. This code gets called when the user releases the left mouse button when they're done drawing the region to add. I'm using David Fannings Find_Boundary (thank you David) function to determine the boundary of the mask which I then use to set the ROI data to. I made a small modification to Find_Boundary so that it can

accept a starting point for the boundary calculations. In a mask with multiple "islands" I can choose the island that I want the boundary for by setting the FirstPt to a location on that island's boundary.

```
oCutAddROI->AppendData, ImageX, ImageY, 0.01
oCutAddROI->SetProperty, Style = 2; I've changed the style to 1 and there
was no difference in generated mask
```

```
;ADD the region
Mask1 = oCutAddROI->ComputeMask(Location =[-128,-128,0.01], Dimensions =
[256,256], Initialize = 0, mask_rule = 0)
Mask = oROI->ComputeMask(Location =[-128,-128,0.01], Dimensions =
[256,256], Initialize = 0, mask_rule = 0)
Mask = Mask + Mask1

indices = Where(Mask GT 0, num_indices)
FirstPt = [Seed.X + 128, Seed.Y + 128]
```

```
if num_indices GT 0 then begin
  Boundary = Find_Boundary(indices, XSize=256, YSize=256, FirstPt =
FirstPt)
  if N_ELEMENTS(Boundary) GT 1 then begin
    SizeBoundary = SIZE(Boundary)
    Data = MAKE_ARRAY(3,SizeBoundary[2],VALUE = 0.01); 0.01 is the Z
position for ROI's
    Data[0,*] = Boundary[0,*] - 128
    Data[1,*] = Boundary[1,*] - 128
    oROI->SetProperty, Data = Data
  endif
endif
```

```
oImage->SetProperty, Data = Mask
```

```
;Delete the CutAddROI Data
oCutAddROI->SetProperty, Data = [0,0], /Hide
oCutAddROI->RemoveData
```

```
oWindow->Draw, oView
```

Thanks in advance

Dan
