
Subject: Re: IDL Shapefile Object

Posted by [David Fanning](#) on Thu, 29 Nov 2001 21:26:19 GMT

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Kelly Dean (krdean@lamar.colostate.edu) writes:

> I created a little procedure to plot Shapefiles with IDLffShape.
> However, it has a memory leak. Can someone point out a plug to stop my
> memory leak?
>
> The routine works great, but when I have to add graphics to 800 images,
> I run out of memory at around 500 images.
>
> A sample routine is available at ...
>
> <ftp://ftp.cira.colostate.edu/Dean/teststate.pro>

The problem here is that the shapefile object returns a structure that itself has pointers in it. (This is really the only way it can be done, because the object doesn't really know anything about the actual shapefile you will load.)

When this happens, you are responsible for cleaning those pointers up yourself. Your particular test program can clean itself up by changing these lines in the DrawSHPMap module:

```
pEnts = PTR_NEW(/ALLOCATE_HEAP)
*pEnts = oShapefile->GetEntity(/ALL, /ATTRIBUTES)
;
FOR I = N_ELEMENTS(*pEnts)-1, 0, -1 DO BEGIN
  PlotEnt, (*pEnts)[I], color=color
ENDFOR
```

To this:

```
pEnts = PTR_NEW(/ALLOCATE_HEAP)
*pEnts = oShapefile->GetEntity(/ALL, /ATTRIBUTES)
;
FOR I = N_ELEMENTS(*pEnts)-1, 0, -1 DO BEGIN
  PlotEnt, (*pEnts)[I], color=color
  Ptr_Free, ((*pEnts)[I]).vertices
  Ptr_Free, ((*pEnts)[I]).measure
  Ptr_Free, ((*pEnts)[I]).parts
  Ptr_Free, ((*pEnts)[I]).part_types
  Ptr_Free, ((*pEnts)[I]).attributes
```

ENDFOR
Ptr_Free, pEnts

That should do it. :-)

Cheers,

David

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