Subject: Re: Turn Object Automatic Clean-up Off?
Posted by Lajos Foldy on Tue, 18 Sep 2012 20:43:03 GMT
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On Tuesday, September 18, 2012 10:27:02 PM UTC+2, Coyote wrote:
> Folks,
>
> It turns out I have written a program that more or less depends on an object's persistence in the IDL environment. This program is not working in IDL 8.2 because the object is automatically cleaned up. It seems to me, I remember reading somewhere how to turn the automatic clean up off for objects, but as usual the documentation is hopeless.
>
> Does anyone know how to turn this off?
>
> Thanks!
>
> David

"The HEAP_REFCOUNT function returns the current reference count for a pointer or object reference (a heap variable). It can also be used to disable garbage collection for a heap variable, or for all heap variables."

regards,
Lajos

Subject: Re: Turn Object Automatic Clean-up Off?
Posted by DavidF[1] on Tue, 18 Sep 2012 20:57:49 GMT
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Lajos writes:

> "The HEAP_REFCOUNT function returns the current reference count for a pointer or object reference (a heap variable). It can also be used to disable garbage collection for a heap variable, or for all heap variables."

Thanks. Big reference at the top of this help page with a link: "See _Automatic Garbage Collection_ for detailed information." But "Automatic Garbage Collection" in the index comes up with absolutely nothing. Sigh... Nothing under "objects", either. All under "heap variables," as if that is the first thing that comes to a user's mind when thinking about objects. How could a new user or a non-IDL newsgroup reader figure any of this out!?

Cheers,

David

Subject: Re: Turn Object Automatic Clean-up Off?
Posted by Lajos Foldy on Tue, 18 Sep 2012 21:03:10 GMT
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On Tuesday, September 18, 2012 10:57:49 PM UTC+2, Coyote wrote:
> Lajos writes:
>
>> "The HEAP_REFCOUNT function returns the current reference count for a pointer or object reference (a heap variable). It can also be used to disable garbage collection for a heap variable, or for all heap variables."
>
>
> Thanks. Big reference at the top of this help page with a link: "See _Automatic Garbage Collection_ for detailed information." But "Automatic Garbage Collection" in the index comes up with absolutely nothing. Sigh... Nothing under "objects", either. All under "heap variables," as if that is the first thing that comes to a user's mind when thinking about objects. How could a new user or a non-IDL newsgroup reader figure any of this out!?
>
> Cheers,
>
> David

Probably the Automatic Garbage Collection information was garbage collected automatically :-)

regards,
Lajos

Subject: Re: Turn Object Automatic Clean-up Off?
Posted by m_schellens on Thu, 20 Sep 2012 13:49:46 GMT
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On Sep 18, 10:27 pm, Coyote <sageande...@gmail.com> wrote:
> Folks,
>
> It turns out I have written a program that more or less depends on an object's persistence in the IDL environment. This program is not working in IDL 8.2 because the object is automatically cleaned up. It seems to me, I remember reading somewhere how to turn the automatic clean up off for objects, but as usual the documentation is hopeless.
>
> Does anyone know how to turn this off?
>
> Thanks!
>
> David

Out of curiosity:

Could you please post an example code where this problem is exposed?
How can an object which has no references any more be of relevance in
an IDL program?
I have a lack of imagination here.

Greetings,
Marc

Subject: Re: Turn Object Automatic Clean-up Off?
Posted by David Fanning on Thu, 20 Sep 2012 14:09:18 GMT
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mschellens writes:

> Could you please post an example code where this problem is exposed?
> How can an object which has no references any more be of relevance in
> an IDL program?
> I have a lack of imagination here.

I think I was probably doing something wrong in the
development of my code. I had a procedure that was
creating a data object and then exiting. When I went
to use my data object, it was gone.

I've restructured the code now, and it seems to run
correctly even if I don't disable automatic garbage
collection, so... I don't have time to fool with it
this morning. :-)

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Turn Object Automatic Clean-up Off?
Posted by Lajos Foldy on Thu, 20 Sep 2012 15:07:49 GMT
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On Thursday, September 20, 2012 3:49:48 PM UTC+2, mschellens wrote:

> Out of curiosity:
>
> Could you please post an example code where this problem is exposed?
>
> How can an object which has no references any more be of relevance in an IDL program?
>
> I have a lack of imagination here.

Earlier, lost references could be restored. Try this example in a fresh IDL session:

```
; test.pro begin
pro s::print
print, "I'm fine!"
end

pro test
s={s, l:0}
o1=obj_new('s')
o1=0                ; lost reference
o2=obj_valid(1, /cast)   ; restored
o2->print
end
; test.pro end

IDL> print, !version
{ x86_64 linux unix linux 7.0 Oct 25 2007     64     64}
IDL> test
I'm fine!
IDL>

IDL> print, !version
{ x86_64 linux unix linux 8.2 Apr 10 2012     64     64}
IDL> test
% Unable to invoke method on NULL object reference: <OBJREF   (<NullObject>)>.
```

regards,
Lajos

Subject: Re: Turn Object Automatic Clean-up Off?
Posted by DavidF[1] on Thu, 20 Sep 2012 21:11:18 GMT
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Marc writes:

> Out of curiosity:

>
> Could you please post an example code where this problem is exposed?
> How can an object which has no references any more be of relevance in
> an IDL program?
>
> I have a lack of imagination here.

Alright, here is *another* irritating example. I have a widget program,
cgZImage, that allows me to zoom into an image. As I move my cursor over
the zoomed image, it prints out the image location and the value of
the image at that location.

I'm working with GeoTiff files a lot, so it would be useful to
have the image location in lat/lon values rather than pixel values.
I want to pass the program a cgMap object, which is what I use to set up
a map projection and coordinate system. I can use this object to covert
a pixel location to a lat/lon value.

I create the map object outside the program:

    mapObj = cgGeoMap(geoTiffFile, Image=image)

Then, I pass both the image and the map object into
my widget program:

    cgZImage, image, Map=mapObj

Inside the program, I store the map object in the info
structure of the program, and try to use it in an event
handler. It is always invalid!!

Indeed:

    IDL> mapObj = cgGeoMap(geoTiffFile, Image=image)
    IDL> Print, Obj_Valid(mapObj)
        1
    IDL> cgZImage, image, MAP=mapObj
    IDL> Print, Obj_Valid(mapObj)
        0

Not at all what I wanted!

Cheers,

David

I wrote a couple of minutes ago:

> Alright, here is *another* irritating example. I have a widget program,
> cgZImage, that allows me to zoom into an image. As I move my cursor over
> the zoomed image, it prints out the image location and the value of
> the image at that location.

OK, too many moving parts for someone my age, I guess. Looks a LOT
like operator now. :-(

Sorry for the confusion.

Cheers,

David