## Subject: Call object cleanup method when IDL exits Posted by dg86 on Thu, 22 Aug 2013 13:04:02 GMT

View Forum Message <> Reply to Message

Dear Folks,

I want to ensure that my object's cleanup method is called when IDL exits. What's the right way to do this?

The issue is that my object spawns a background process that it subsequently kills when the object is cleaned up. It appears that IDL does not automatically call objects' cleanup methods when it shuts down normally. Consequently, the background process can be left running.

This isn't a problem for well-written programs that explicitly call obj\_destroy. It arises all the time during interactive sessions, however.

Is there a switch that tells IDL to be extra fastidious about cleaning up objects? Perhaps an equivalent to IDL\_STARTUP that works on shutdown? Or is there some other technique to ensure that every object on the heap is cleaned up before IDL shuts down?

Many thanks,

David

Subject: Re: Call object cleanup method when IDL exits Posted by Moritz Fischer on Thu, 22 Aug 2013 14:31:59 GMT View Forum Message <> Reply to Message

```
Hi David,
```

```
sorry, I didn't mean to pm you.

However, I just figured out you can do this:

PRO my_exit
help, LEVEL=-1, OUTPUT=o
funny_array = strsplit( strjoin( o, ' '),' ', /EXTRACT)
foreach var, funny_array do $
tmp = temporary( scope_varfetch(var, LEVEL=-1, /ENTER) )
tmp=42
exit
END
```

Neverthe less: Let me know if you find something more elegant!

cheers

Am 22.08.2013 15:04, schrieb David Grier: > Dear Folks, > > I want to ensure that my object's cleanup method is called when IDL exits. > What's the right way to do this? > > The issue is that my object spawns a background process that it subsequently > kills when the object is cleaned up. It appears that IDL does not automatically > call objects' cleanup methods when it shuts down normally. > Consequently, the background process can be left running. > This isn't a problem for well-written programs that explicitly call obj\_destroy. > It arises all the time during interactive sessions, however. Is there a switch that tells IDL to be extra fastidious about cleaning up objects? > Perhaps an equivalent to IDL STARTUP that works on shutdown? Or is there some > other technique to ensure that every object on the heap is cleaned up before > IDL shuts down? > Many thanks, > David

## Subject: Re: Call object cleanup method when IDL exits Posted by dg86 on Thu, 22 Aug 2013 17:25:24 GMT

View Forum Message <> Reply to Message

On Thursday, August 22, 2013 9:04:02 AM UTC-4, David Grier wrote:

> Dear Folks. > > > I want to ensure that my object's cleanup method is called when IDL exits. > What's the right way to do this? > > > The issue is that my object spawns a background process that it subsequently > kills when the object is cleaned up. It appears that IDL does not automatically > call objects' cleanup methods when it shuts down normally. >

> Consequently, the background process can be left running.

```
>
>
  This isn't a problem for well-written programs that explicitly call obj_destroy.
>
  It arises all the time during interactive sessions, however.
>
>
  Is there a switch that tells IDL to be extra fastidious about cleaning up objects?
>
  Perhaps an equivalent to IDL STARTUP that works on shutdown? Or is there some
>
  other technique to ensure that every object on the heap is cleaned up before
> IDL shuts down?
>
>
 Many thanks,
>
>
> David
```

Subject: Re: Call object cleanup method when IDL exits Posted by dg86 on Thu, 22 Aug 2013 17:29:24 GMT

View Forum Message <> Reply to Message

Hi Moritz,

Thanks for this very helpful response. The only tweak I've added is to test the strings returned by HELP to make sure that they're valid variable names. My next step may be to emulate the IDL\_STARTUP mechanism by testing for an IDL\_SHUTDOWN environment variable and executing any commands in the named file before calling exit.

```
help, level=-99, output=o
variables = strsplit(strjoin(o,' '),' ',/extract)
foreach var, variables do begin
   if idl_validname(var) then begin
      tmp = temporary(scope_varfetch(var, level=-1, /enter))
      tmp = 42; the answer to the question
   endif
endforeach
```

```
exit
end
All the best,
David
On Thursday, August 22, 2013 10:31:59 AM UTC-4, Moritz Fischer wrote:
> Hi David,
>
>
 sorry, I didn't mean to pm you.
  However, I just figured out you can do this:
>
>
  PRO my_exit
>
    help, LEVEL=-1, OUTPUT=o
>
>
    funny_array = strsplit( strjoin( o, ' '),' ', /EXTRACT)
>
>
    foreach var, funny_array do $
>
     tmp = temporary( scope_varfetch(var, LEVEL=-1, /ENTER) )
>
>
    tmp=42
>
    exit
>
> END
>
>
  Neverthe less: Let me know if you find something more elegant!
>
> cheers
>
> Am 22.08.2013 15:04, schrieb David Grier:
>
```

```
>> Dear Folks,
>>
>
>> I want to ensure that my object's cleanup method is called when IDL exits.
>> What's the right way to do this?
>>
>
   The issue is that my object spawns a background process that it subsequently
>>
   kills when the object is cleaned up. It appears that IDL does not automatically
>>
>
>> call objects' cleanup methods when it shuts down normally.
   Consequently, the background process can be left running.
>>
   This isn't a problem for well-written programs that explicitly call obj_destroy.
   It arises all the time during interactive sessions, however.
>>
>> Is there a switch that tells IDL to be extra fastidious about cleaning up objects?
>> Perhaps an equivalent to IDL_STARTUP that works on shutdown? Or is there some
>> other technique to ensure that every object on the heap is cleaned up before
>> IDL shuts down?
>>
>> Many thanks,
>>
>> David
>>
```

Subject: Re: Call object cleanup method when IDL exits Posted by Michael Galloy on Thu, 22 Aug 2013 17:36:46 GMT

## On 8/22/13 7:04 AM, David Grier wrote:

- > Is there a switch that tells IDL to be extra fastidious about cleaning up objects?
- > Perhaps an equivalent to IDL\_STARTUP that works on shutdown? Or is there some
- > other technique to ensure that every object on the heap is cleaned up before
- > IDL shuts down?

The only hook into when IDL exits that I know of is the routine registered with IDL\_ExitRegister in a DLM.

Mike

--

Michael Galloy www.michaelgalloy.com

Modern IDL: A Guide to IDL Programming (http://modernidl.idldev.com)

Research Mathematician Tech-X Corporation