Subject: Re: _EXTRA inheritance crashing IDL
Posted by Mark Hadfield on Wed, 10 Apr 2002 22:41:34 GMT
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"Rob Preece" <Rob.Preece@msfc.nasa.gov> wrote in message
news:Rob.Preece-1004021625170001@biggamma.nsstc.nasa.gov...
> OK, Rob de-lurking here.
>
> Has anyone seen a behavior where IDL 5.5 crashes on a call to a
> subroutine with an added _EXTRA keyword? I have found the same
> behavior on several different machines, Linux and Mac, which does
> not exist under 5.4. Here goes a test case:
>
> PRO test1, _REF_EXTRA = extra
>
> testStuff = ['TITLE','XTITLE','YTITLE']
>
> test2, INDGEN (10), _EXTRA = [testStuff, 'XRANGE']
>
> END
>
> PRO test2, plotStuff, _EXTRA = extra
>
> PLOT, plotStuff, plotStuff, _EXTRA = extra
>
> END

It crashes for me too (IDL 5.5, Windows 2000). IDL quits
immediately--I don't get a chance to see any error messages.

I have never had a crash before related to keyword inheritance in IDL
5.5, though I use keyword inheritance extensively. But then I never
use the idiom you do in test1, ie. passing a string array to
_EXTRA. (One of the reasons I do not do this is that it does not
support keyword abbreviations.) Can you do without it? Ie:

```
PRO test1, _REF_EXTRA = extra
  test2, INDGEN (10), _EXTRA=extra
END
```

or in IDL 5.5 only:

```
PRO test1, _REF_EXTRA = extra
  test2, INDGEN (10), _STRICT_EXTRA=extra
END
```

--
Mark Hadfield
m.hadfield@niwa.co.nz Ka puwaha et tai nei

Subject: Re: _EXTRA inheritance crashing IDL
Posted by David Fanning on Thu, 11 Apr 2002 02:05:42 GMT
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Rob Preece (Rob.Preece@msfc.nasa.gov) writes:

> OK, Rob de-lurking here.

Oh, good. :-)

> Has anyone seen a behavior where IDL 5.5 crashes on a call to a subroutine
> with an added _EXTRA keyword? I have found the same behavior on several
> different machines, Linux and Mac, which does not exist under 5.4. Here
> goes a test case:
>
> PRO test1, _REF_EXTRA = extra
>
> testStuff = ['TITLE','XTITLE','YTITLE']
>
> test2, INDGEN (10), _EXTRA = [testStuff, 'XRANGE']
>
> END
>
> PRO test2, plotStuff, _EXTRA = extra
>
> PLOT, plotStuff, plotStuff, _EXTRA = extra
>
> END
>
>
> Compile and execute :
>
> IDL> test1, XRANGE = [-1, 10]
>
> On 5.4, I get a nice plot, with my new XRANGE. On 5.5, I get a *totally
> irrelevant* error message:

Well, yes, it crashes IDL 5.5, but not IDL 5.4. But I
don't think you can hold RSI responsible for using their
keyword inheritance mechanism in such a bogus way.
Formatting the keywords you want to pass as a structure
(the way this was meant to work) is error free:

PRO test1, _REF_EXTRA = extra

```
   testStuff = {TITLE:'bob',XTITLE:'jim',YTITLE:'mary'}
   test2, INDGEN (10), _Extra=Create_Struct(testStuff, 'XRange',[0,5])
END

PRO test2, plotStuff, _EXTRA = extra
   PLOT, plotStuff, plotStuff, _EXTRA = extra
END
```

Cheers,

David
--
David W. Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438, E-mail: david@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: _EXTRA inheritance crashing IDL
Posted by Mark Hadfield on Thu, 11 Apr 2002 03:44:54 GMT
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"David Fanning" <david@dfanning.com> wrote in message
news:MPG.171e9d5d95b9c99c98987f@news.frii.com...
> Rob Preece (Rob.Preece@msfc.nasa.gov) writes:
>> Has anyone seen a behavior where IDL 5.5 crashes on a call to a
>> subroutine with an added _EXTRA keyword? I have found the same
>> behavior on several different machines, Linux and Mac, which does
>> not exist under 5.4.
>
> Well, yes, it crashes IDL 5.5, but not IDL 5.4. But I don't think
> you can hold RSI responsible for using their keyword inheritance
> mechanism in such a bogus way. Formatting the keywords you want to
> pass as a structure (the way this was meant to work) is error free:
>
> PRO test1, _REF_EXTRA = extra
>   testStuff = {TITLE:'bob',XTITLE:'jim',YTITLE:'mary'}
>   test2, INDGEN (10), _Extra=Create_Struct(testStuff, 'XRange',[0,5])
> END

But Rob was trying to supply keywords to test1 and have them passed to
test2. And the way he did it is valid according to the IDL docs. See
heading "Keyword Inheritance", subheading "Selective Keyword
Redirection", where they give the example

```
  PRO SOMEPROC, _REF_EXTRA = ex
  ONE, _EXTRA=['MOOSE', 'SQUIRREL']
```

```
 TWO, _EXTRA='SQUIRREL'
 END
```

(Yes, it is odd that the variable name ex is not used.)

--
Mark Hadfield
m.hadfield@niwa.co.nz Ka puwaha et tai nei
http://katipo.niwa.co.nz/~hadfield Hoea tatou
National Institute for Water and Atmospheric Research (NIWA)

Subject: Re: _EXTRA inheritance crashing IDL
Posted by David Fanning on Thu, 11 Apr 2002 04:42:24 GMT
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Mark Hadfield (m.hadfield@niwa.co.nz) writes:

> But Rob was trying to supply keywords to test1 and have them passed to
> test2. And the way he did it is valid according to the IDL docs. See
> heading "Keyword Inheritance", subheading "Selective Keyword
> Redirection", where they give the example
>
> PRO SOMEPROC, _REF_EXTRA = ex
> ONE, _EXTRA=['MOOSE', 'SQUIRREL']
> TWO, _EXTRA='SQUIRREL'
> END
>
> (Yes, it is odd that the variable name ex is not used.)

Well, there you go. I need to spend less time playing
tennis and more time reading the manual. :-(

Cheers,

David

P.S. Let's just say a well-exercised body leads to
a limber mind. :-)

--
David W. Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438, E-mail: david@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com/
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: _EXTRA inheritance crashing IDL
Posted by Rob.Preece on Thu, 11 Apr 2002 20:21:04 GMT
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In article <MPG.171e9d5d95b9c99c98987f@news.frii.com>, david@dfanning.com wrote:

> Rob Preece (Rob.Preece@msfc.nasa.gov) writes:
>
>> OK, Rob de-lurking here.
>
> Oh, good. :-)
>
<snip>
>
> Well, yes, it crashes IDL 5.5, but not IDL 5.4. But I
> don't think you can hold RSI responsible for using their
> keyword inheritance mechanism in such a bogus way.
> Formatting the keywords you want to pass as a structure
> (the way this was meant to work) is error free:
>
> PRO test1, _REF_EXTRA = extra
> testStuff = {TITLE:'bob',XTITLE:'jim',YTITLE:'mary'}
> test2, INDGEN (10), _Extra=Create_Struct(testStuff, 'XRange',[0,5])
> END
>
> PRO test2, plotStuff, _EXTRA = extra
> PLOT, plotStuff, plotStuff, _EXTRA = extra
> END
>
> Cheers,
>
> David

Thanks David,

But:

I have a *very* good reason for doing it this way (otherwise, why bother! ;) I have a set of keywords to pass on to an embedded plot routine, and I can't know at the time what their values will be. I have a plot zooming function in a widget (object) that simply calls the object's 'PLOT' method, passing new x and y ranges. The plot method does some stuff, and then hands it all off to the IDL (direct) PLOT routine, adding in the 'XRANGE' and 'YRANGE' keywords so that they can be overridden when the 'ZOOM' method is invoked. Very much like 'test1' in my sample code. Since I followed the documentation as Mark H. mentioned, is this a valid bug in IDL? How to proceed?

Maybe I'll just go for a beer (unfortunately, no good Colorado brews make it into Alabama!)...

- Rob
