
Subject: `_STRICT_EXTRA` keyword

Posted by [David Fanning](#) on Fri, 22 Mar 2002 17:22:25 GMT

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Mark Hadfield mentioned a "`_STRICT_EXTRA`" keyword that is available in IDL 5.5 the other day. I have reason to think this may be what I am looking for, but I can't seem to find it in the ... uh ... IDL 5.5 documentation. :-(

Does anyone know where this is? I've tried paging through the What's New in IDL 5.5 pdf file (including looking in the Index), but apart from going through the damn thing word by word I have no idea....

Thanks,

David

--

David W. Fanning, Ph.D.

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

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Subject: Re: `_STRICT_EXTRA` keyword

Posted by [Malcolm Walters](#) on Fri, 22 Mar 2002 17:28:38 GMT

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A quick loop in my paper copy shows this to be on page 33/34 under 'New Ability to Check for Keyword Inheritance Errors'
Malcolm Walters

"David Fanning" <david@dfanning.com> wrote in message news:MPG.1705163ee9742028989843@news.frii.com...

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Subject: Re: `_STRICT_EXTRA` keyword
Posted by [David Fanning](#) on Fri, 22 Mar 2002 18:04:48 GMT
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Malcolm Walters (Malcolm.Walters@jet.uk) writes:

> A quick loop in my paper copy shows this to be on page 33/34 under 'New
> Ability to Check for Keyword Inheritance Errors'

Thank you.

David

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Subject: Re: `_STRICT_EXTRA` keyword
Posted by [btupper](#) on Fri, 22 Mar 2002 18:29:48 GMT
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On Fri, 22 Mar 2002 10:22:25 -0700, David Fanning <david@dfanning.com>
wrote:

> Mark Hadfield mentioned a "`_STRICT_EXTRA`" keyword that
> is available in IDL 5.5 the other day. I have reason
> to think this may be what I am looking for, but I can't
> seem to find it in the ... uh ... IDL 5.5 documentation. :-(
>

Hi,

While the topic of `*_Extra` has surfaced... a while back there was an
informative discussion here about the subtleties of `_EXTRA` and
`_REF_EXTRA`. Was there ever a 'tutorial' ala the Rebin/Refom tutorial
pulled together? I get an awful lot out of those.

I ask because this has been a slippery subject for me. Everytime I build an object that inherits another, I fiddle-faddle with the inherited keywords with my fingers crossed until these keywords are properly passed along.

The last time I did this (with the xGrid_Data object) I got so knotted-up that in the end I decided to simply copy *every* keyword for the superclass (Grid_Data object) into the INIT of the subclass object. It cut the knot, but it kinda hangs out there like an untucked shirt (and I hope no one notices.)

Now this _Strict_Extra keyword... well, as Pooh might say, "Oh, bother!"

Ben

Subject: Re: _STRICT_EXTRA keyword
Posted by [JD Smith](#) on Fri, 22 Mar 2002 20:01:16 GMT
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Ben Tupper wrote:

>
> On Fri, 22 Mar 2002 10:22:25 -0700, David Fanning <david@dfanning.com>
> wrote:
>> Mark Hadfield mentioned a "_STRICT_EXTRA" keyword that
>> is available in IDL 5.5 the other day. I have reason
>> to think this may be what I am looking for, but I can't
>> seem to find it in the ... uh ... IDL 5.5 documentation. :-(
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> Hi,
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> While the topic of *_Extra has surfaced... a while back there was an
> informative discussion here about the subtiles of _EXTRA and
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> pulled together? I get an awful lot out of those.
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> object. It cut the knot, but it kinda hangs out there like an

> untucked shirt (and I hope no one notices.)
>
> Now this _Strict_Extra keyword... well, as Pooh might say, "Oh,
> bother!"
>

Ben,

You may find this bit I wrote up interesting. Too much detail for a tutorial, but it gives you the basic ideas, and even touches on _STRICT_EXTRA (bother indeed). I may repurpose this as a tutorial if enough people bug me.

<http://groups.google.com/groups?selm=3BE2FCDF.6A63C4C9%40ast.ro.cornell.edu>

JD

Subject: Re: _STRICT_EXTRA keyword
Posted by [A. D. & J.C. Cool](#) on Sat, 23 Mar 2002 02:22:50 GMT
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David Fanning wrote:

>
> Malcolm Walters (Malcolm.Walters@jet.uk) writes:
>
>> A quick loop in my paper copy shows this to be on page 33/34 under 'New
>> Ability to Check for Keyword Inheritance Errors'
>
> Thank you.
>
> David

David,

A simple Find operation on that IDLv55 HTML Help file that's on your site would have found "strict_extra" in half a jiff... ;-)

Andrew

Subject: Re: _STRICT_EXTRA keyword
Posted by [David Fanning](#) on Sat, 23 Mar 2002 06:21:08 GMT
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Andrew Cool (cooladjc@chariot.net.au) writes:

> A simple Find operation on that IDLv55 HTML Help file that's on your
> site would have found "strict_extra" in half a jiff... ;-)

Oh, right. I really ought to have a look at that site
sometime. :-)

Cheers,

David

--

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Subject: Re: `_STRICT_EXTRA` keyword

Posted by [btupper](#) on Mon, 25 Mar 2002 14:23:25 GMT

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On Fri, 22 Mar 2002 13:01:16 -0700, JD Smith <jdsmith@as.arizona.edu>
wrote:

> You may find this bit I wrote up interesting. Too much detail for a
> tutorial, but it gives you the basic ideas, and even touches on
> `_STRICT_EXTRA` (bother indeed). I may repurpose this as a tutorial if
> enough people bug me.
>
> <http://groups.google.com/groups?selm=3BE2FCDF.6A63C4C9%40ast.ro.cornell.edu>
>

Thanks JD,

I hadn't look long enough for that discussion, and now I wish I had.
Is it a silly idea to wish for yet another `*_extra` keyword? Here's
what is rattling around in my head: `_VAL_EXTRA`. This keyword would
perform the same service as `_EXTRA`, but would make the reference vs.
value behavior clearer to folks like me (who have enough empty space
between the ears for things to rattle around in.)

My confusion about these keywords is quite similar to my confusion
when I was learning about Newton's first law of motion. It was a
useless exercise until someone pointed out that you have to pay
attention to 'on', 'by' and other such clues in "When one object
applies a force **on** another...." Such is the case here, for me,

when I think about the following snippets:

From you...

- > So, bottom line rule of thumb: always use `_EXTRA` in your calls (or at
- > least, never use `_REF_EXTRA`...)

and..

- > The RSI developers discovered a trick, however:
- > they could isolate the required change only to the routine definition,
- > and allow all the calling routines (including existing code) to continue
- > to use `_EXTRA` as-is. And some routines might just do both! Yes, you
- > can pass on a by-reference inherited keyword set to a by-value
- > inheriting routine: the conversion is automatic.

From David...

- > Here is the rule of thumb I would use. On every
- > `GetProperty` method, I would **define** a `_Ref_Extra`
- > keyword. But on every **call** to a `GetProperty` method
- > I would use an `_Extra` keyword to pass the extra
- > structure.

From Ted...

- > When keywords are stored and passed along in
- > the `_EXTRA` structures created in function declarations, however, they are
- > stored in fields by value and the reference information is lost. This is
- > fine if you only want to **USE** the value, but not if you want to **CHANGE** the
- > value stored in the argument. In order to change the value in some other
- > function, `_REF_EXTRA` allows you to pass along the output keywords by
- > reference.

Thanks again,

Ben
