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Subject: Re: baffling syntax error  
Posted by [Gray](#) on Thu, 22 Apr 2010 21:04:08 GMT  
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On Apr 22, 5:03 pm, Gray <grayliketheco...@gmail.com> wrote:

> Hi all,  
>  
> I have a function declaration with both positional and keyword  
> parameters like this:  
>  
> FUNCTION WR\_subtract, imga, imgb, WARP\_DEG=wdeg, SKY\_STYLE=skyst, \$  
> SCALE\_STYLE=scast  
>  
> ...and in another procedure I call the function like this:  
>  
> interp\_res =  
> wr\_subtract(intrp,civ,warp\_deg=3.,sky\_style=1,scale\_style=1)  
>  
> However, that function call gives me a syntax error when I try to  
> compile:  
>  
> interp\_res =  
> wr\_subtract(intrp,civ,warp\_deg=3.,sky\_style=1,scale\_style=1)  
>  
> ^  
> % Syntax error.  
>  
> Why the error??  
>  
> Thanks!  
> --Gray

Hm... because of text wrapping, that didn't quite work. The error is  
apparently at "warp\_deg=3."

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Subject: Re: baffling syntax error  
Posted by [penteado](#) on Thu, 22 Apr 2010 21:14:14 GMT  
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On Apr 22, 6:04 pm, Gray <grayliketheco...@gmail.com> wrote:

> On Apr 22, 5:03 pm, Gray <grayliketheco...@gmail.com> wrote:  
>  
>  
>  
>  
>  
>> Hi all,

```

>
>> I have a function declaration with both positional and keyword
>> parameters like this:
>
>> FUNCTION WR_subtract, imga, imgb, WARP_DEG=wdeg, SKY_STYLE=skyst, $
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>>   wr_subtract(intrp,civ,warp_deg=3.,sky_style=1,scale_style=1)
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>>   interp_res =
>>   wr_subtract(intrp,civ,warp_deg=3.,sky_style=1,scale_style=1)
>>
> ^
>> % Syntax error.
>
>> Why the error??
>
>> Thanks!
>> --Gray
>
> Hm... because of text wrapping, that didn't quite work. The error is
> apparently at "warp_deg=3.".

```

Sounds like IDL is interpreting wr\_subtract(...) as an array, not a function. Do you use compile\_opt idl2?

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Subject: Re: baffling syntax error

Posted by [Michael Galloy](#) on Thu, 22 Apr 2010 21:16:51 GMT

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On 4/22/10 3:03 PM, Gray wrote:

```

> Hi all,
>
> I have a function declaration with both positional and keyword
> parameters like this:
>
> FUNCTION WR_subtract, imga, imgb, WARP_DEG=wdeg, SKY_STYLE=skyst, $
>   SCALE_STYLE=scast
>
> ...and in another procedure I call the function like this:
>
>

```

```

> interp_res =
> wr_subtract(intrp,civ,warp_deg=3.,sky_style=1,scale_style=1)
>
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>     interp_res =
>     wr_subtract(intrp,civ,warp_deg=3.,sky_style=1,scale_style=1)
>                                     ^
> % Syntax error.
>
> Why the error??
>
> Thanks!
> --Gray

```

I would guess that IDL thinks that "wr\_subtract" is an array and you invalidly indexing it. Fix this with a "compile\_opt strictarr" statement at the beginning of the routine that \*calls\* wr\_subtract (and, of course, by using []'s, not ()'s, to index arrays inside that routine).

Mike

--

www.michaelgalloy.com  
 Research Mathematician  
 Tech-X Corporation

Subject: Re: baffling syntax error  
 Posted by [Gray](#) on Thu, 22 Apr 2010 21:29:46 GMT  
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On Apr 22, 5:16 pm, mgalloy <mgal...@gmail.com> wrote:

```

> On 4/22/10 3:03 PM, Gray wrote:
>
>
>
>
>
>
>> Hi all,
>
>> I have a function declaration with both positional and keyword
>> parameters like this:
>
>> FUNCTION WR_subtract, imga, imgb, WARP_DEG=wdeg, SKY_STYLE=skyst, $
>>     SCALE_STYLE=scast
>
>> ...and in another procedure I call the function like this:

```

```

>
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>
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>>     wr_subtract(interp,civ,warp_deg=3.,sky_style=1,scale_style=1)
>>
> ^
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>
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>
>> Thanks!
>> --Gray
>
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> at the beginning of the routine that *calls* wr_subtract (and, of
> course, by using []'s, not ()'s, to index arrays inside that routine).
>
> Mike
> --www.michaelgalloy.com
> Research Mathematician
> Tech-X Corporation

```

Haha. I always forget about this, since I only index arrays with []  
thanks to my c++ background.

---



---

Subject: Re: baffling syntax error  
 Posted by [R.G.Stockwell](#) on Thu, 22 Apr 2010 22:49:16 GMT  
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"Gray" <graylikethecolor@gmail.com> wrote in message  
 news:3fd12140-7afc-4375-b8d6-3bf139f1d2ab@e21g2000vbb.google groups.com...  
 On Apr 22, 5:16 pm, mgalloy <mgal...@gmail.com> wrote:  
 > On 4/22/10 3:03 PM, Gray wrote:  
 ....

> Haha. I always forget about this, since I only index arrays with []  
 > thanks to my c++ background.

one followup would be to figure out why this happened in the first place.  
 You may not have paths/ etc set up correctly, causing IDL to think it

was an array.

---

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Subject: Re: baffling syntax error  
Posted by [penteado](#) on Thu, 22 Apr 2010 23:16:06 GMT  
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On Apr 22, 7:49 pm, "R.G. Stockwell" <noem...@please.com> wrote:  
> "Gray" <grayliketheco...@gmail.com> wrote in message  
>  
> news:3fd12140-7afc-4375-b8d6-3bf139f1d2ab@e21g2000vbb.google groups.com...  
> On Apr 22, 5:16 pm, mgalloy <mgal...@gmail.com> wrote:> On 4/22/10 3:03 PM, Gray wrote:  
>  
> ....  
>  
>> Haha. I always forget about this, since I only index arrays with []  
>> thanks to my c++ background.  
>  
> one followup would be to figure out why this happened in the first place.  
> You may not have paths/ etc set up correctly, causing IDL to think it  
> was an array.

No path problems are needed. Without the compile\_opt, if a name is used by a variable and there is no function with that name already compiled, IDL will assume it is a variable name, and will not try to find a function to compile. But if a compiled function uses a name, any references to the name will be interpreted as function calls, ignoring a variable of the same name, regardless of when the variable was defined.

---

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Subject: Re: baffling syntax error  
Posted by [R.G.Stockwell](#) on Fri, 23 Apr 2010 16:49:47 GMT  
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>  
>  
> "pp" <pp.penteado@gmail.com> wrote in message  
> news:691274b1-c3fe-4a80-b984-822c70bdc9dc@g30g2000prf.google groups.com...  
> On Apr 22, 7:49 pm, "R.G. Stockwell" <noem...@please.com> wrote:  
>> "Gray" <grayliketheco...@gmail.com> wrote in message  
>>  
>> news:3fd12140-7afc-4375-b8d6-3bf139f1d2ab@e21g2000vbb.google groups.com...  
>> On Apr 22, 5:16 pm, mgalloy <mgal...@gmail.com> wrote:> On 4/22/10 3:03  
>> PM, Gray wrote:  
>>  
>> ....

>>  
>>> Haha. I always forget about this, since I only index arrays with []  
>>> thanks to my c++ background.  
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>> one followup would be to figure out why this happened in the first  
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> used by a variable and there is no function with that name already  
> compiled, IDL will assume it is a variable name, and will not try to  
> find a function to compile. But if a compiled function uses a name,  
> any references to the name will be interpreted as function calls,  
> ignoring a variable of the same name, regardless of when the variable  
> was defined.

agree. i'm just guessing as to the cause, and path problems are  
very common. Could either be a newly created function that is not in  
the cached path, or perhaps misnamed, or not in the path at all.

My point being, if it is a problem like that, then it will still be a  
problem  
in the future, and the compile option won't fix it.

cheers,  
bob

---

Subject: Re: baffling syntax error  
Posted by [David Fanning](#) on Fri, 23 Apr 2010 17:36:39 GMT  
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R.G. Stockwell writes:

> agree. i'm just guessing as to the cause, and path problems are  
> very common. Could either be a newly created function that is not in  
> the cached path, or perhaps misnamed, or not in the path at all.  
>  
> My point being, if it is a problem like that, then it will still be a  
> problem  
> in the future, and the compile option won't fix it.

I've taken it as the Gospel truth that if files  
are named correctly this problem NEVER occurs:

<http://www.dfanning.com/tips/namefiles.html>

But I ran into a situation about a month ago, and I don't remember all the details now, but, basically, the ONLY way to solve the problem was to add a compile option. It made me wonder if IDL had changed something about the order in which it sorts things out, because I had never run into this problem before.

I'll have to get a beer or two, probably, before I can remember all the details. :-(

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

---

Subject: Re: baffling syntax error

Posted by [Gray](#) on Fri, 23 Apr 2010 18:44:42 GMT

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On Apr 23, 1:36 pm, David Fanning <n...@dfanning.com> wrote:

> R.G. Stockwell writes:

>> agree. i'm just guessing as to the cause, and path problems are  
>> very common. Could either be a newly created function that is not in  
>> the cached path, or perhaps misnamed, or not in the path at all.

>

>> My point being, if it is a problem like that, then it will still be a  
>> problem

>> in the future, and the compile option won't fix it.

>

> I've taken it as the Gospel truth that if files  
> are named correctly this problem NEVER occurs:

>

> <http://www.dfanning.com/tips/namefiles.html>

>

> But I ran into a situation about a month ago, and I  
> don't remember all the details now, but, basically,  
> the ONLY way to solve the problem was to add a  
> compile option. It made me wonder if IDL had changed  
> something about the order in which it sorts things out,

> because I had never run into this problem before.  
>  
> I'll have to get a beer or two, probably, before I  
> can remember all the details. :-(  
>  
> Cheers,  
>  
> David  
>  
> --  
> David Fanning, Ph.D.  
> Fanning Software Consulting, Inc.  
> Coyote's Guide to IDL Programming:<http://www.dfanning.com/>  
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Well, here's what happened - the function that was being called was included in a file along with a bunch of other routines. I needed to write another wrapper to use some of those functions to work in a limited capacity only, so I was simply compiling the original wrapper file before I compiled my new wrapper file. BUT, at one point I forgot to do that, so I got the above error. Since I already write code in strict\_arr anyway (it's much less confusing to read), I should just turn on idl2 out of habit, so these things don't happen.

---

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Subject: Re: baffling syntax error  
Posted by [David Fanning](#) on Fri, 23 Apr 2010 19:11:37 GMT  
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Gray writes:

> Well, here's what happened - the function that was being called was  
> included in a file along with a bunch of other routines. I needed to  
> write another wrapper to use some of those functions to work in a  
> limited capacity only, so I was simply compiling the original wrapper  
> file before I compiled my new wrapper file. BUT, at one point I  
> forgot to do that, so I got the above error. Since I already write  
> code in strict\_arr anyway (it's much less confusing to read), I should  
> just turn on idl2 out of habit, so these things don't happen.

Well, order restored. File naming snafu. :-)

Cheers,

David

--



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

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Subject: Re: baffling syntax error  
Posted by [R.G.Stockwell](#) on Fri, 23 Apr 2010 19:56:26 GMT  
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>  
> "Gray" <graylikethecolor@gmail.com> wrote in message  
> news:e6a63f50-7cd4-4ad8-a6c9-9c0832835ff8@d34g2000vbl.google groups.com...  
>  
> Well, here's what happened - the function that was being called was  
> included in a file along with a bunch of other routines. I needed to  
> write another wrapper to use some of those functions to work in a  
> limited capacity only, so I was simply compiling the original wrapper  
> file before I compiled my new wrapper file. BUT, at one point I  
> forgot to do that, so I got the above error. Since I already write  
> code in strict\_arr anyway (it's much less confusing to read), I should  
> just turn on idl2 out of habit, so these things don't happen.

That is what i was going for. And, setting idl2 does not prevent  
you from getting an error in that scenario, though I assume you  
get a more useful error message. :)

cheers,  
bob

PS some idl users never compile a routine.

---