
Subject: arrays vs. functions conflicts

Posted by [Paolo Grigis](#) on Fri, 05 Mar 2004 11:28:15 GMT

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Dear IDL experts,

since I was lucky enough to learn IDL after the []-brackets revolution, the potential conflicts between arrays() and function() calls never bothered me until I found out about it... then the nightmares really started. ;-)

Thus my problem:

To resolve the conflict {that is, limits.pro being already compiled and procedure.pro refusing to compile because it has an old-fashioned statement like var=limits(1:2) instead of var=limits[1:2]} I'm thinking of automatically compiling the (hopefully) few troubling routines like procedure.pro at startup using the resolve_routine() statement. (BTW, why is the IDL compiler (5.5) not smart enough to understand that function(1:2) is an array? ":" is never allowed in function calls, after all.)

But before going on, I just wanted to know if there is an easier way out of this that I have overlooked (and no, I definitely do not want to override useful programs written by others with my own []-version, only to start all over again each time a new version or bug fix of the routine comes out).

Greetings,
Paolo

DISCLAIMER: any IDL code, variable names and procedure statements cited in this message are purely fictional and any resemblance to real code, variable names and procedure statements, living or dead, is coincidental.

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Subject: Re: arrays vs. functions conflicts
Posted by [David Fanning](#) on Fri, 05 Mar 2004 16:47:12 GMT
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Paolo Grigis writes:

> Dear Craig,
>
> should you ever feel like giving up idl 4, I think you could be
> surprised how many people might volunteer to help you translating
> some code to []-notation!

Oh, dear. Now I feel badly about dumping on poor Craig. I had no idea it was *his* code you were using. It's just whenever I run into this problem it is... well, never mind.

Craig has his own problems (with users who don't like to upgrade their software all that often, one supposes). And I know for a fact that maintaining multiple versions of the same (free!!) library ain't gonna happen. :-)

Cheers,

David

P.S. Let's just say I don't mind spending a few minutes adding a couple of square brackets for the kind of code I'm getting for free. :-)

--

David Fanning, Ph.D.
Fanning Software Consulting
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: arrays vs. functions conflicts
Posted by [Paul Van Delst\[1\]](#) on Fri, 05 Mar 2004 16:57:55 GMT
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David Fanning wrote:

>
> Craig has his own problems (with users who don't like
> to upgrade their software all that often, one supposes).
> And I know for a fact that maintaining multiple versions
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>
> Cheers,
>

> David
>
> P.S. Let's just say I don't mind spending a few minutes
> adding a couple of square brackets for the kind of code
> I'm getting for free. :-)

I emphatically second that. Craig's MPFIT package allowed me to easily and quickly create/test/refine a model to better estimate infrared sea surface emissivities. That model (implemented in Fortran90) is now in use in the global forecast system here at EMC. If those little improvements in estimating emissivities lead to better utilisation of satellite data which may in turn lead to a more accurate forecast that will, potentially, save lives -- then as far as I'm concerned, Craig can use whatever notation he wants! :o)

paulv

--

Paul van Delst
CIMSS @ NOAA/NCEP/EMC

Subject: Re: arrays vs. functions conflicts
Posted by [David Fanning](#) on Fri, 05 Mar 2004 19:34:31 GMT
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Bruce Bowler writes:

> IDL could *NOT* care less about. The way you wrote it IDL, since it could
> care less, must care some, and we know IDL doesn't give a rats arse...
>
> We now return you to your regularly scheduled discussion.
>
> end pet peeve alert

Yes, yes, yes. I'm working quickly today. :-)

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Subject: Re: arrays vs. functions conflicts

Paolo Grigis <pgrigis@astro.phys.ethz.ch> writes:

> Dear Craig,
>
> should you ever feel like giving up idl 4, I think you could be
> surprised how many people might volunteer to help you translating
> some code to []-notation!

Dear Paolo--

I admit that I don't use IDL 4 any more. *BUT*, my finger muscles still know round parenthesis for IDL. It's not a habit I can easily change.

The behavior you found is frustrating, because IDL should be smarter than that. In fact, it *was* smarter in the past. IDL 4 and IDL 5.0 had no problems with your example, so there was something that RSI changed in IDL 5.1 that dumb-ified IDL's recognition of arrays.

Note that even if I put these explicit statements in MPFIT:

```
limits = 0 & limits(0) = 0
```

before any other uses, so clearly IDL *should* know that LIMITS is a variable in this context, IDL 5.1 and above fails to compile.

Truly unfortunate. I would consider changing to square bracket notation, but it's hard to find time for such a mundane task. Knowing that I did it right is another issue. I guess I'll try Wayne's auto-converter at some point soon. And then I have to retrain my fingers.

Craig

--

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Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
