Subject: Re: 2-d histogram and Routines of same name
Posted by David Fanning on Mon, 17 May 2010 12:57:49 GMT
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Mrunmayee writes:

> Then I felt this is a histogram problem. So went to IDL's hist_2d
> which does what I want, but doesn't return reverse indices. But I did
> find hist_nd written byt David. This routine uses PRODUCT(.., /
> Preserve_Type). Unfortunately, idlastrolib ALSO contains the routine
> of the same name which DOESN'T use the keywords in IDL's routine. So I
> keep getting KEYWORD NOT ALLOWED error. My guess is that (becaue of
> various issues, I have to set my IDL_PATH such that) this other
> routine always get compiled first. When I have such a problem, of
> having two routines of same name doing things differently, I usually
> compile with full path. E.g
>
> .com /path/to/routine/I/want/routinename
>
> But I don't think there is any product.pro in IDL's libs. So my second
> problem is how do I tell IDL to use inbuilt function instead of user
> written when there is no .pro file associated with it?

Well, you are right, your first problem is a 2D
histogram problem. :-)

Your second problem is more worrisome. (And it is
JD Smith's routine, not mine. I just host it.) This
may truly be one of those problems that don't have
a good solution. Or, maybe I just haven't thought of
it yet.

If I just wanted to get on with my day, I'd probably
delete product.pro from the NASA library. It seems to
be a subset of the IDL routine, although there is no
question in my mind which was on the IDL scene first.

But I can absolutely see why this isn't a good long-term
solution. Maybe PRODUCT has been in IDL long enough now
that Wayne could safely remove it from the NASA Library.
I don't know. I'd like to hear what the principles
have to say about this.

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: 2-d histogram and Routines of same name
Posted by wlandsman on Mon, 17 May 2010 14:46:53 GMT
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> But I can absolutely see why this isn't a good long-term
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product.pro was removed from the NASA Library on 25-Nov-2007.   --Wayne

---

Subject: Re: 2-d histogram and Routines of same name
Posted by Michael Galloy on Mon, 17 May 2010 14:58:10 GMT
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On 5/17/10 6:57 AM, David Fanning wrote:
> Mrunmayee writes:
>
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>> which does what I want, but doesn't return reverse indices. But I did
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It seems that PRODUCT is a built-in, not .pro code or in a DLM. So I
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and used it. Maybe this was different in older versions of IDL? The docs
say PRODUCT was introduced in IDL 5.6, but I only have access back to
IDL 6.4 where it still seems to be a built-in.

Mike
--
www.michaelgalloy.com
Research Mathematician
Tech-X Corporation

Subject: Re: 2-d histogram and Routines of same name
Posted by wlandsman on Mon, 17 May 2010 15:22:59 GMT
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On May 17, 10:58 am, mgalloy <mgal...@gmail.com> wrote:

> It seems that PRODUCT is a built-in, not .pro code or in a DLM. So I
> made my own PRODUCT routine, but couldn't get IDL to ever use it, even
> if I manually compiled it. IDL always found the built-in PRODUCT first
> and used it. Maybe this was different in older versions of IDL? The docs
> say PRODUCT was introduced in IDL 5.6, but I only have access back to
> IDL 6.4 where it still seems to be a built-in.

It was built-in back in IDL 5.6.   My only guess is that the OP has
an IDL version of V6.0 or earlier (to go along with his old version of
the NASA library?), or perhaps is using GDL.   (The /PRESERVE_TYPE
keyword to PRODUCT() that is causing the error was introduced in
V6.1).   --Wayne

Subject: Re: 2-d histogram and Routines of same name
Posted by David Fanning on Mon, 17 May 2010 15:51:04 GMT

wlandsman writes:

> product.pro was removed from the NASA Library on 25-Nov-2007.   --Wayne

Whoops! My number one rule is: Make sure you have the
latest version of the Library before complaining.

Humm. I thought I updated mine when I got the new
OS!? Oh, well. Compassion is the end result of making
mistakes. At least, I hope it is. :-)

Cheers,

David

P.S. Maybe you have to *delete* what is already there,
before you overwrite with new stuff. :-(

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

Subject: Re: 2-d histogram and Routines of same name
Posted by Mrunmayee on Tue, 18 May 2010 05:04:08 GMT

On May 17, 8:51 pm, David Fanning <n...@dfanning.com> wrote:
> wlandsman writes:
>> product.pro was removed from the NASA Library on 25-Nov-2007.   --Wayne
>
> Whoops! My number one rule is: Make sure you have the
> latest version of the Library before complaining.
>
> Humm. I thought I updated mine when I got the new
> OS!? Oh, well. Compassion is the end result of making
> mistakes. At least, I hope it is. :-)
>

Same here! I have the goddard library which is bundled in SDSS
library. This, I downloaded in November 2008, but product.pro
definitely shows up in goddard/pro/misc. Is that different from

NASA's? I tried to move the other routine out of path, reset session, and use hist_nd again. It still gave me KEYWORD error.

Of course, I read Wayne's reply and it makes sense.. My IDL version is 6.0.3 Student's. Of course it would give error. So I commented the keyword for the time being and it works for me. When I have enough money, I will upgrade to better versions..

Thanks everyone for your input!

PS: What's OP in Wayne's post? Other Poster?

Subject: Re: 2-d histogram and Routines of same name
Posted by Michael Galloy on Tue, 18 May 2010 12:24:07 GMT

On 5/17/10 11:04 pm, Mrunmayee wrote:
> PS: What's OP in Wayne's post? Other Poster?

OP = original poster

Mike
--
www.michaelgalloy.com
Research Mathematician
Tech-X Corporation

Subject: Re: 2-d histogram and Routines of same name
Posted by Mrunmayee on Tue, 18 May 2010 12:59:06 GMT

On May 18, 5:24 pm, Michael Galloy <mgal...@gmail.com> wrote:
> On 5/17/10 11:04 pm, Mrunmayee wrote:
>
>> PS: What's OP in Wayne's post? Other Poster?
>
> OP = original poster
>
> Mike
> --www.michaelgalloy.com
> Research Mathematician
> Tech-X Corporation

Oh! (My hindsight has 20 sheeps now.)

Subject: Re: 2-d histogram and Routines of same name
Posted by Kenneth P. Bowman on Tue, 18 May 2010 17:48:23 GMT

In article <hsrli1$s0r$1@speranza.aioe.org>,
 mgalloy <mgalloy@gmail.com> wrote:

> It seems that PRODUCT is a built-in, not .pro code or in a DLM. So I
> made my own PRODUCT routine, but couldn't get IDL to ever use it, even
> if I manually compiled it. IDL always found the built-in PRODUCT first
> and used it. Maybe this was different in older versions of IDL? The docs
> say PRODUCT was introduced in IDL 5.6, but I only have access back to
> IDL 6.4 where it still seems to be a built-in.

For a few built-in IDL routines I have fixed bugs or made
minor modifications (routines for which ITT provides the
source code). I keep these in a separate directory and insert that
directory into the IDL search path ahead of the default search
path.

Maybe that won't work for those routines for which ITT does
not provide source code (precompiled routines) ?

Ken

Subject: Re: 2-d histogram and Routines of same name
Posted by Jeremy Bailin on Tue, 18 May 2010 19:53:46 GMT

On May 18, 1:48 pm, "Kenneth P. Bowman" <k-bow...@null.edu> wrote:
> In article <hsrli1$s0...@speranza.aioe.org>,
>
>   mgalloy <mgal...@gmail.com> wrote:
>> It seems that PRODUCT is a built-in, not .pro code or in a DLM. So I
>> made my own PRODUCT routine, but couldn't get IDL to ever use it, even
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> not provide source code (precompiled routines) ?
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> Ken

I'd be very hesitant to knowingly create a function with the same name
as one that is part of the official distribution, for exactly the
reasons we're seeing here. When I extend/bugfix ITT routines, I give
them a slightly different name (usually either prefixed by JB or
having some suffix that indicates what's been changed, e.g. MEAN_D).

-Jeremy.

Subject: Re: 2-d histogram and Routines of same name
Posted by Kenneth P. Bowman on Tue, 18 May 2010 21:58:43 GMT

In article
<55c0cb24-cb7b-4365-8258-c1b21601b133@b21g2000vbh.googlegroups.com>,
 Jeremy Bailin <astroconst@gmail.com> wrote:

>> In article <hsrli1$s0...@speranza.aioe.org>,
>>

>>> It seems that PRODUCT is a built-in, not .pro code or in a DLM. So I
>>> made my own PRODUCT routine, but couldn't get IDL to ever use it, even
>>> if I manually compiled it. IDL always found the built-in PRODUCT first
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> reasons we're seeing here. When I extend/bugfix ITT routines, I give
> them a slightly different name (usually either prefixed by JB or
> having some suffix that indicates what's been changed, e.g. MEAN_D).

Yes, what you suggest is normally the best approach.

Unfortunately these are functions that are called by other built-in
routines in the iTools library, and I don't have the fortitude to
attempt to duplicate that entire code base, change names, change all
references to the updated functions, etc.

I limit this practice to a handful of routines.

Cheers, Ken