Subject: Re: Math errors tracked! To a built-in library...
Posted by Craig Markwardt on Wed, 02 Nov 2011 15:42:38 GMT
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On Nov 1, 2:53 pm, Ed Hyer <ejh...@gmail.com> wrote:
> !except=2; blow up all math errors
> ...
> % Program caused arithmetic error: Floating divide by 0
> % Detected at MEAN 1 /usr/local/itt/idl71/lib/mean.pro
>
> If you understand why this gives me a sad, and you have any tips on
> finding the operation that tried to /0, please share.

Perhaps you are supplying an array with all NaNs? MEAN() simply calls
MOMENT() so you could practice doing that yourself.

Craig

Subject: Re: Math errors tracked! To a built-in library...
Posted by MarioIncandenza on Wed, 02 Nov 2011 17:06:51 GMT
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On Nov 2, 8:42 am, Craig Markwardt <craig.markwa...@gmail.com> wrote:
> Perhaps you are supplying an array with all NaNs? MEAN() simply calls
> MOMENT() so you could practice doing that yourself.
>
> Craig

Craig,

The obstacle is that the debug information IDL is providing gives me
nothing to go on about where to locate the /0. MEAN is called directly
in only about 20 places in the code I am looking to debug, but I
strongly suspect that some other IDL "builtins" call MEAN as well.

How can I get the stack trace of math errors, rather than just the
useless information that MEAN was called with a bad input?

--Edward H.

Subject: Re: Math errors tracked! To a built-in library...
Posted by David Fanning on Wed, 02 Nov 2011 17:19:43 GMT
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Ed Hyer writes:

> The obstacle is that the debug information IDL is providing gives me
> nothing to go on about where to locate the /0. MEAN is called directly
> in only about 20 places in the code I am looking to debug, but I
> strongly suspect that some other IDL "builtins" call MEAN as well.
>
> How can I get the stack trace of math errors, rather than just the
> useless information that MEAN was called with a bad input?

Are you *certain* you are calling the IDL version of the MEAN
function?

```
IDL> Print, File_Which('mean.pro')
```

Cheers,

David

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

Subject: Re: Math errors tracked! To a built-in library...
Posted by MarioIncandenza on Wed, 02 Nov 2011 19:37:13 GMT
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On Nov 2, 10:19 am, David Fanning <n...@dfanning.com> wrote:
> Are you *certain* you are calling the IDL version of the MEAN
> function?

% Detected at MEAN 1 /usr/local/itt/idl71/lib/mean.pro

FILE_WHICH() agrees.

Subject: Re: Math errors tracked! To a built-in library...
Posted by David Fanning on Wed, 02 Nov 2011 19:54:59 GMT
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Ed Hyer writes:

>

> On Nov 2, 10:19 am, David Fanning <n...@dfanning.com> wrote:
>> Are you *certain* you are calling the IDL version of the MEAN
>> function?
>
> % Detected at MEAN 1 /usr/local/itt/idl71/lib/mean.pro
>
> FILE_WHICH() agrees.

Well, then I would replace the ON_ERROR, 2
call in Mean with this:

```
  Catch, theError
  IF theError NE 0 THEN BEGIN
    Catch, /CANCEL
    void = Error_Message()
    RETURN
  ENDIF
```

That will allow you to track the error.

Cheers,

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