Subject: Interpreter stack not aligned properly during user return. Posted by Nuno Oliveira on Fri, 05 Mar 2004 15:32:45 GMT

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Interpreter stack not aligned properly during user return.

Can anyone help about this error message? What may cause this?

By the way. Is, in IDL tutorials, a section what interpreting error messages?

Cheers.

Nuno.

Subject: Re: Interpreter stack not aligned properly during user return. Posted by Nuno Oliveira on Fri, 05 Mar 2004 17:16:37 GMT View Forum Message <> Reply to Message

Seems that the only error was that I was doing

```
(mask)[indices] = 255b
```

instead of

mask[indices] = 255b

Well, mask is indeed a tag of a pointer to structures. But the question is that the question was solved only by removing the parenthesis.

```
"Nuno Oliveira" <nmoliveira@fc.ul.pt> wrote in message
news:c2a6n4$fhn$1@pegasus.fccn.pt...
> Interpreter stack not aligned properly during user return.
>
> Can anyone help about this error message? What may cause this?
>
> By the way. Is, in IDL tutorials, a section what interpreting error
> messages?
> Cheers,
```

>

> Nuno.

Subject: Re: Interpreter stack not aligned properly during user return. Posted by David Fanning on Fri, 05 Mar 2004 17:35:01 GMT

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Nuno Oliveira writes:

- > Well, mask is indeed a tag of a pointer to structures. But the question is
- > that the question was solved only by removing the parenthesis.

Ah, right. Now I remember. Well done. And you can still make that hot date tonight! :-)

I'll write this one down. It's worth remembering.

Cheers,

David

--

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

Subject: Re: Interpreter stack not aligned properly during user return. Posted by David Fanning on Fri, 05 Mar 2004 17:56:06 GMT View Forum Message <> Reply to Message

David Fanning writes:

> I'll write this one down. It's worth remembering.

Oh, I *had* this one written down already. (Probably why I vaguely remembered it.) It used to issue a different error message. It used to say "Temporary Variables Still Checked Out". Now it says, "Internal error: The Interpreter stack is not empty on exit."

http://www.dfanning.com/code tips/tempvar.html

This message is *so* much better! :-)

Cheers.

David

--

David Fanning, Ph.D.

Subject: Re: Interpreter stack not aligned properly during user return. Posted by JD Smith on Mon, 08 Mar 2004 20:17:02 GMT

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On Fri, 05 Mar 2004 10:56:06 -0700, David Fanning wrote:

> David Fanning writes:

>

>> I'll write this one down. It's worth remembering.

- > Oh, I *had* this one written down already. (Probably why I
- > vaguely remembered it.) It used to issue a different
- > error message. It used to say "Temporary Variables Still
- > Checked Out". Now it says, "Internal error: The Interpreter
- stack is not empty on exit." >

>

http://www.dfanning.com/code_tips/tempvar.html >

> This message is *so* much better! :-)

The lesson is, of course, don't use unnecessary parentheses! To decide which parentheses are actually necessary when using pointers, arrays, and structures together, you could consult the operator precedence tutorial.

JD

Subject: Re: Interpreter stack not aligned properly during user return. Posted by Craig Markwardt on Tue, 09 Mar 2004 03:16:28 GMT View Forum Message <> Reply to Message

JD Smith <ipdsmith@as.arizona.edu> writes:

>

- > The lesson is, of course, don't use unnecessary parentheses! To decide
- > which parentheses are actually necessary when using pointers, arrays, and
- > structures together, you could consult the operator precedence tutorial.

...or get addicted to crack cocaine. That seems easier and produces the same effect. :-)

Craig

Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

Subject: Re: Interpreter stack not aligned properly during user return. Posted by David Fanning on Tue, 09 Mar 2004 04:15:55 GMT View Forum Message <> Reply to Message

Craig Markwardt writes:

- >> The lesson is, of course, don't use unnecessary parentheses! To decide
- >> which parentheses are actually necessary when using pointers, arrays, and
- >> structures together, you could consult the operator precedence tutorial.

- > ...or get addicted to crack cocaine. That seems easier and produces
- > the same effect. :-)

That's what I was thinking, too, but I couldn't tell if my eyes were blurring from tiredness or just the effort to keep all those parentheses straight when I had a pointer to a structure that had a pointer....

Oh, my God, I'm dizzy again!

Cheers.

David

David Fanning, Ph.D. Fanning Software Consulting

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

Subject: Re: Interpreter stack not aligned properly during user return. Posted by Stein Vidar Hagfors H[2] on Fri, 12 Mar 2004 16:40:12 GMT View Forum Message <> Reply to Message

David Fanning <david@dfanning.com> writes:

- > Craig Markwardt writes:
- >>> The lesson is, of course, don't use unnecessary parentheses! To decide
- >>> which parentheses are actually necessary when using pointers, arrays, and
- >>> structures together, you could consult the operator precedence tutorial.

>>

```
...or get addicted to crack cocaine. That seems easier and produces
the same effect. :-)
That's what I was thinking, too, but I couldn't tell
if my eyes were blurring from tiredness or just the
```

- offert to keep all those perentheses straight when
- > effort to keep all those parentheses straight when
- > I had a pointer to a structure that had a pointer....

>

> Oh, my God, I'm dizzy again!

Not to mention the *HORRIBLE* fact I discovered (the hard way) not too long ago, that IDL goes against all common sense putting AND and OR on equal footing wrt precedence:

```
IDL> print, 1 or 0 and 0
0
IDL> print, 1 or (0 and 0)
```

Yikes!!! I've used IDL for sooo many years, and heaven knows how many statements of the form "a OR b AND c" there are in my programs, causing unintended results! IMO they might as well abandon the whole idea of operator precedence, switching to a clearly stated, randomized evaluation approach. That way, everybody would know that you'd better put in every darn parenthesis that you *think* is superfluous.

Stein Vidar Hagfors Haugan

ESA SOHO SOC/European Space Agency Science Operations Coordinator for SOHO

NASA Goddard Space Flight Center, Tel.: 1-301-286-9028 Mail Code 682.3, Bld. 26, Room G-1, Cell: 1-240-354-6066 Greenbelt, Maryland 20771, USA. Fax: 1-301-286-0264

Subject: Re: Interpreter stack not aligned properly during user return. Posted by Craig Markwardt on Fri, 12 Mar 2004 17:15:20 GMT View Forum Message <> Reply to Message

Stein Vidar Hagfors Haugan <steinhh@astro.uio.no> writes:

- > That way, everybody would know that you'd better
- > put in every darn parenthesis that you *think* is superfluous.

Except when extra parentheses cause misaligned stack errors. :-)

Craig
Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu Astrophysics, IDL, Finance, Derivatives Remove "net" for better response
Subject: Re: Interpreter stack not aligned properly during user return. Posted by Stein Vidar Hagfors H[2] on Fri, 12 Mar 2004 20:45:12 GMT View Forum Message <> Reply to Message
Craig Markwardt <craigmnet@removecow.physics.wisc.edu> writes:</craigmnet@removecow.physics.wisc.edu>
 Stein Vidar Hagfors Haugan <steinhh@astro.uio.no> writes:</steinhh@astro.uio.no> That way, everybody would know that you'd better put in every darn parenthesis that you *think* is superfluous. Except when extra parentheses cause misaligned stack errors. :-)
Well, at least you get an error message, not simply a quiet calculation of the wrong result ;-)

Stein Vidar Hagfors Haugan ESA SOHO SOC/European Space Agency Science Operations Coordinator for SOHO
NASA Goddard Space Flight Center Tel : 1 201 296 0029

NASA Goddard Space Flight Center, Tel.: 1-301-286-9028 Mail Code 682.3, Bld. 26, Room G-1, Cell: 1-240-354-6066 Greenbelt, Maryland 20771, USA. Fax: 1-301-286-0264

Subject: Re: Interpreter stack not aligned properly during user return. Posted by Mark Hadfield on Sat, 13 Mar 2004 02:28:30 GMT View Forum Message <> Reply to Message

Stein Vidar Hagfors Haugan wrote:

- > Not to mention the *HORRIBLE* fact I discovered (the hard way) not too
- > long ago, that IDL goes against all common sense putting AND and OR on
- > equal footing wrt precedence:

I guess I am betraying my lack of commone sense here, but which of these do you think *should* take precedence?

Mark Hadfield "Ka puwaha te tai nei, Hoea tatou" m.hadfield@niwa.co.nz National Institute for Water and Atmospheric Research (NIWA)