
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

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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\$fh\$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
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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
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JD Smith <jdsmith@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
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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
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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
> 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)
1
```

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:

> 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. :-)

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.: 1-301-286-9028
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
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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, Hoesa tatou"
m.hadfield@niwa.co.nz
National Institute for Water and Atmospheric Research (NIWA)
