
Subject: Re: heap_free fatal error
Posted by [Wox](#) on Thu, 07 Aug 2008 14:30:32 GMT
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> Did anyone observed heap_free crashing the IDL process and what was
> the cause in your case?

I managed to extract the critical code:

```
n=30000l
p0=ptr_new({i:0l,next:ptr_new()})
p=p0
for i=1l,n do begin
  (*p).next=ptr_new({i:i,next:ptr_new()})
  p=(*p).next
endfor
heap_free,p0 ; FATAL ERROR
```

Is this a known bug?

Subject: Re: heap_free fatal error
Posted by [David Fanning](#) on Thu, 07 Aug 2008 14:34:40 GMT
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Wox writes:

```
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>
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> p0=ptr_new({i:0l,next:ptr_new()})
> p=p0
> for i=1l,n do begin
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>   p=(*p).next
> endfor
> heap_free,p0 ; FATAL ERROR
>
>
> Is this a known bug?
```

Now it is. :-)

It sure does ruin my day, IDL 7.0.1 on Windows 32-bit.

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: heap_free fatal error

Posted by [Wox](#) on Thu, 07 Aug 2008 14:38:33 GMT

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On Thu, 07 Aug 2008 16:30:32 +0200, Wox <nomail@hotmail.com> wrote:

>> Did anyone observed heap_free crashing the IDL process and what was
>> the cause in your case?

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> n=30000l

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> p=p0

> for i=1l,n do begin

> (*p).next=ptr_new({i:i,next:ptr_new()})

> p=(*p).next

> endfor

> heap_free,p0 ; FATAL ERROR

>

>

> Is this a known bug?

I tried with IDL 6.2 on a Linux machine: no Fatal error

{ x86 linux unix linux 6.2 Jun 20 2005 32 64}

Subject: Re: heap_free fatal error

Posted by [Michael Galloy](#) on Thu, 07 Aug 2008 15:03:55 GMT

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Seg faulted on Mac:

IDL> print, !version

{ i386 darwin unix Mac OS X 7.0 Oct 25 2007 32 64}

But runs OK on Linux:

```
IDL> print, !version  
{ x86 linux unix linux 7.0 Oct 25 2007    32    64}
```

Mike

--

www.michaelgalloy.com
Tech-X Corporation
Software Developer II

Wox wrote:

```
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>> the cause in your case?
```

>

```
> I managed to extract the critical code:
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>

```
> n=30000l
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```
> p0=ptr_new({i:0l,next:ptr_new()})
```

```
> p=p0
```

```
> for i=1l,n do begin
```

```
>   (*p).next=ptr_new({i:i,next:ptr_new()})
```

```
>   p=(*p).next
```

```
> endfor
```

```
> heap_free,p0 ; FATAL ERROR
```

>

>

```
> Is this a known bug?
```

Subject: Re: heap_free fatal error

Posted by [Bob\[3\]](#) on Thu, 07 Aug 2008 15:11:18 GMT

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On Aug 7, 10:30 am, Wox <nom...@hotmail.com> wrote:

```
>> Did anyone observed heap_free crashing the IDL process and what was  
>> the cause in your case?
```

>

```
> I managed to extract the critical code:
```

>

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> n=30000l
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```
> p0=ptr_new({i:0l,next:ptr_new()})
```

```
> p=p0
```

```
> for i=1l,n do begin
```

```
>   (*p).next=ptr_new({i:i,next:ptr_new()})
```

```
>   p=(*p).next
```

```
> endfor
```

```
> heap_free,p0 ; FATAL ERROR
```

>

```
> Is this a known bug?
```

Add

x86 Win32 Windows Microsoft Windows 6.4 Mar 23 2007 32 64

to the list of versions with this bug.

So far it looks like it's only Windows systems affected...

Subject: Re: heap_free fatal error

Posted by [Jean H.](#) on Thu, 07 Aug 2008 16:04:22 GMT

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> Add

> x86 Win32 Windows Microsoft Windows 6.4 Mar 23 2007 32 64

>

> to the list of versions with this bug.

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as well as

IDL> print, !version

{ x86 Win32 Windows Microsoft Windows 6.3 Mar 23 2006 32 64}

Jean

Subject: Re: heap_free fatal error

Posted by [Wox](#) on Fri, 08 Aug 2008 11:14:24 GMT

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Thanks guys. I reported the problem to ITTVIS.

Subject: Re: heap_free fatal error

Posted by [lambda.knight](#) on Tue, 26 Aug 2008 22:26:25 GMT

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Hey, guys,

This problem is due to a stack overflow in the code that cleans up the heap. I submitted a fix and it should show up in a future version. A quick band-aid until then is to increase the stack size for IDL. On *nix systems, that's usually done with the "ulimit" command. On Windows, I think you can do it with "editbin.exe". Here's a webpage that has a little bit more detail on how to increase the stack size: <http://www.cs.nyu.edu/exact/core/doc/stackOverflow.txt>

Unfortunately, this work around isn't a complete fix. You can still

run into this problem, but it will take a much larger object to hit it. On OS X, setting the stack size to the maximum let me run the OP's code with $n=149000l$.

Mark Eret
ITT Visual Information Solutions
