
Subject: Re: IDL 6.3 segmentation fault

Posted by [David Fanning](#) on Thu, 01 Jun 2006 15:39:37 GMT

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shd writes:

> I wanted to post this as a reply to a thread on this group called
> 'How to debug seg fault' but it's past the 30 day mark. The author of
> that thread experienced something similar.
>
> I'm getting a bit of odd behavior from my widget program on Ubuntu
> 5.10. My GUI has a 'File' menu and a toolbar, both of which contain an
> 'Exit' item which execute the exact same code:
>
> =====
> pro _exit, top
> widget_control, top, /DESTROY
> end
> =====
>
> I'm working from the command-line interpreter, not the IDE. Here's the
> wierdness:
>
> I compile and launch my program and press the 'Exit' button on the
> toolbar. When I try to re-launch the program, my GUI doesn't come up
> and IDL exits with only a 'Segmentation fault' message. However, if I
> exit my GUI by simply killing the window (clicking the 'X' on the
> border), the seg. fault doesn't occur. Also, if I exit the GUI by
> selecting 'Exit' from the 'File' menu, the seg. fault doesn't occur.
> So I launched the IDE to step through the program and it got much
> stranger. I can't reproduce the segmentation fault from the IDE no
> matter how I exit my GUI.
>
> Any else seen something like this?

Strangely written widget program!

This is not an event handler, so I presume it is a KILL_NOTIFY
callback. But, assigned to two different widgets!? I suggest
you are not killing what you **think** you are killing. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

Subject: Re: IDL 6.3 segmentation fault
Posted by [shd](#) on Thu, 01 Jun 2006 15:55:44 GMT
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David Fanning wrote:

>
> Strangely written widget program!
>
> This is not an event handler, so I presume it is a KILL_NOTIFY
> callback. But, assigned to two different widgets!? I suggest
> you are not killing what you *think* you are killing. :-)
>
> Cheers,
>
> David
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
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<rereads his post... smacks his forehead>
Ok, I see the confusion. Clarification:

```
=====
pro _exit, top
  widget_control, top, /DESTROY
end

pro action_event, event
  widget_control, event.id, GET_UVALUE=action

  case action of
    ...
    'exit': _exit, event.top
    ...
  endcase
end

pro build_gui
  ...

  ; Create 'File' menu.
  wmenu = widget_button(mbar, VALUE='File', /MENU, $
    EVENT_PRO='action_event')
  ...
  w = widget_button(wmenu, VALUE='Exit', UVALUE='exit', /SEPARATOR)
  ...

  ; Create toolbar.
```

```

wtb = widget_base(tlb, UNAME='toolbar', /ROW, /TOOLBAR, $
  EVENT_PRO='action_event')
...
w = widget_button(wtb, VALUE='Exit', UVALUE='exit', $
  TOOLTIP='Exit program.')
...
end
=====

```

I probably should have just said that in the first place, huh?

Subject: Re: IDL 6.3 segmentation fault

Posted by [David Fanning](#) on Thu, 01 Jun 2006 16:18:46 GMT

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shd writes:

```

> Ok, I see the confusion. Clarification:
>
> =====
> pro _exit, top
>   widget_control, top, /DESTROY
> end
>
> pro action_event, event
>   widget_control, event.id, GET_UVALUE=action
>
>   case action of
>     ...
>     'exit': _exit, event.top
>     ...
>   endcase
> end
>
> pro build_gui
>   ...
>
> ; Create 'File' menu.
> wmenu = widget_button(mbar, VALUE='File', /MENU, $
>   EVENT_PRO='action_event')
>   ...
> w = widget_button(wmenu, VALUE='Exit', UVALUE='exit', /SEPARATOR)
>   ...
>
> ; Create toolbar.
> wtb = widget_base(tlb, UNAME='toolbar', /ROW, /TOOLBAR, $
>   EVENT_PRO='action_event')

```

```
> ...
> w = widget_button(wtb, VALUE='Exit', UVALUE='exit', $
>     TOOLTIP='Exit program.')
> ...
> end
> =====
>
> I probably should have just said that in the first place, huh?
```

Well, poorly named widget program, then. :-)

In any case, I don't see anything (except needless indirection) that causes me any worries. Perhaps you are not calling the `_EXIT` procedure you **think** you are calling. Easily done, I think, with this kind of naming scheme.

Cheers,

David

--

David Fanning, Ph.D.

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Subject: Re: IDL 6.3 segmentation fault

Posted by [shd](#) on Thu, 01 Jun 2006 17:13:32 GMT

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David Fanning wrote:

```
> Well, poorly named widget program, then. :-)
> In any case, I don't see anything (except needless indirection) that
> causes me any worries. Perhaps you are not calling the _EXIT procedure
> you *think* you are calling. Easily done, I think, with this
> kind of naming scheme.
```

I agree. My snippet suggests that the program name is 'build_gui', but that's not the case. I also posted generic names for my procedures because I'm sure that my actual naming scheme (which consists of unique names) has nothing to do with this issue. I've checked that. I agree that the indirection was needless so I dropped the `'_exit'` procedure and replaced it with the `'widget_control'` call, but I'm still experiencing the crash.

It really isn't that big a deal, just a mild annoyance which is easily avoided (ie.: don't use the toolbar button). I just thought it was

strange that IDL doesn't crash until I try to restart the program and only from the command-line interpreter, not from the IDE.

Thanks for the suggestions.

P.S. Good work on the website. It's been a great resource.

Subject: Re: IDL 6.3 segmentation fault
Posted by [David Fanning](#) on Thu, 01 Jun 2006 17:22:59 GMT
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shd writes:

> I agree. My snippet suggests that the program name is 'build_gui', but
> that's not the case. I also posted generic names for my procedures
> because I'm sure that my actual naming scheme (which consists of unique
> names) has nothing to do with this issue. I've checked that. I agree
> that the indirection was needless so I dropped the '_exit' procedure
> and replaced it with the 'widget_control' call, but I'm still
> experiencing the crash.
>
> It really isn't that big a deal, just a mild annoyance which is easily
> avoided (ie.: don't use the toolbar button). I just thought it was
> strange that IDL doesn't crash until I try to restart the program and
> only from the command-line interpreter, not from the IDE.

I think it's strange, too. :-)

And if all is as you say it is, I would lean more toward "bug"
than "error", especially if it is reproducible.

> P.S. Good work on the website. It's been a great resource.

Thanks. :-)

Cheers,

David

--

David Fanning, Ph.D.

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