
Subject: endless loops suck

Posted by [Thomas Gutzler](#) on Fri, 31 Jan 2003 02:54:38 GMT

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Hey :)

Is there any way to stop this while debugging ?

I tried CTRL+C and CTRL+BREAK which sometimes helps but not in this case.

```
pro loop_it
  a = 1
  while (1) do a = a + 1
end

pro kill_idl
  print, 'start'
  ; debugger is here and you pressed accidentally 'F10'
=> loop_it
  print, 'stop'
end

*loop*,
Tom
```

Subject: Re: endless loops suck

Posted by [alt](#) on Tue, 04 Feb 2003 10:26:48 GMT

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on my win98 !version = { x86 Win32 Windows 5.4 Sep 25 2000 32
64}

I have the next situation

```
while 1 do a = 0 ; can not be breaked
```

```
while 1 do begin ; can not be breaked
  a = 0
endwhile
```

```
while 1 do begin ; can be breaked by
  a = 0 ; 1. clicking on Break button (always works)
  print, " ; 2. pressing F9 with cursor on desired line
endwhile ; 3. pressing Cntl-Break (sometimes interrupts with
; very long delay or does not work at all)
```

Print is very time consuming operation, so I usually use something like this:

```
if i mod 1000 EQ 0 then print, i, N
```

Instead of "print" TMP = WIDGET_EVENT(/NOWAIT) can be used. It forces IDL to process Windows events including break events and events that were sent to IDL by other applications. It allows other applications continue to work and makes the work on Windows "smoother" while IDL is running.

Altyntsev Dmitriy

Thomas Gutzler <tgutzler@ee.uwa.edu.au> wrote in message news:<3E39E56E.5050803@ee.uwa.edu.au>...

```
> Hey :)
>
> Is there any way to stop this while debugging ?
> I tried CTRL+C and CTRL+BREAK which sometimes helps but not in this case.
>
>   pro loop_it
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>     ; debugger is here and you pressed accidentally 'F10'
> => loop_it
>     print, 'stop'
>   end
>
> *loop*,
>   Tom
```

Subject: Re: endless loops suck
Posted by [David Fanning](#) on Tue, 04 Feb 2003 14:25:23 GMT
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Altyntsev Dmitriy (alt@iszf.irk.ru) writes:

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> Print is very time consuming operation, so I usually use something
> like this:
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> Instead of "print" TMP = WIDGET_EVENT(/NOWAIT) can be used. It forces
> IDL to
```

- > process Windows events including break events and events that were
- > sent to IDL by other applications. It allows other applications
- > continue to work and makes the work on Windows "smoother" while IDL is
- > running.

This is interesting, and suggestive, too. I wonder if the ability to break into WHILE loops was added when management of widget programs was taken out of XManager. Makes sense that you would have to check back to the command line periodically to see if a widget event was waiting to be processed. If so, this would be the first ever evidence of a positive benefit from allowing users access to the IDL command line when widget programs were running. :-)

Cheers,

David

--

David W. Fanning, Ph.D.

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

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: endless loops suck

Posted by [Mark Hadfield](#) on Tue, 04 Feb 2003 21:12:19 GMT

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"Altyntsev Dmitriy" <alt@iszf.irk.ru> wrote in message
news:6b9fda50.0302040226.319c7487@posting.google.com...

- >
- > [Discussing on how to make IDL code interruptible under Windows]
- >
- > Instead of "print", TMP = WIDGET_EVENT(/NOWAIT) can be used. It
- > forces IDL to process Windows events including break events and
- > events that were sent to IDL by other applications. It allows other
- > applications continue to work and makes the work on Windows
- > "smoother" while IDL is running.

Very nice! For many years now I have used a "yielder widget" for this purpose (David's progress bar widget will also do) but I have always wanted a more lightweight, less visually obtrusive method. I always thought you needed to feed a valid widget ID to WIDGET_EVENT!

Just a couple of extra comments, based on experiments on my system (IDL 5.6, Win 2000, Pentium 2 800 MHz)

This is interruptible

```
while 1 do begin & tmp = widget_event(/NOWAIT) & endwhile
```

but this is not (so don't try it at home)

```
while 1 do tmp = widget_event(/NOWAIT)
```

In other words, as proposed by David, the begin and end do matter. I'm sorry for doubting you, David!

The overhead for calling WIDGET_EVENT is small, about 5.5 microseconds (cf 39 nanoseconds per iteration for an empty for loop).

--

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

Subject: Re: endless loops suck
Posted by [David Fanning](#) on Tue, 04 Feb 2003 21:36:17 GMT
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Mark Hadfield (m.hadfield@niwa.cri.nz) writes:

> In other words, as proposed by David, the begin and end do matter. I'm
> sorry for doubting you, David!

Really, Mark! You can take everything I say for the Gospel truth.
Just examine the record. ;-)

Cheers,

David

P.S. Let's just say that in baseball (which is more and more resembling one of those Kiwi free-for-alls you call rugby) having a .500 batting average is the epitome of excellence.

--

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Subject: Re: endless loops suck

Posted by [Thomas Gutzler](#) on Wed, 05 Feb 2003 01:21:03 GMT

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Timm Weitkamp wrote:

> Today at 09:57 +0800, Thomas Gutzler wrote:

>

>> How is this possible ?

>>

>> FOR i=0,4 DO PRINT, i, ' ', /NONEWLINE

>> ^^^^^^^ this may be a problem

>> Result:

>> 0 1 2 3 4

>

>

> Use a format string (see also "Format codes" in the online help), like

> this:

>

> FOR i=0,4 DO PRINT, i, FORMAT='(\$,I1," ")'

> PRINT

doh!

I tried FOR i=0,4 DO PRINT, i, FORMAT='(5(I1," "))'

close :)

thx all for enlightenin me with all this inspiring stuff :)

Tom
