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Subject: Re: Memory allocation problem

Posted by [R.G. Stockwell](#) on Wed, 26 Nov 2008 17:15:29 GMT

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"David Fanning" <[news@dfanning.com](mailto:news@dfanning.com)> wrote in message  
news:MPG.23972ed74e6c1fd498a566@news.giganews.com...

> Jean H. writes:

>

>> 3)divide your work!... don't use 1 big array, but 4,9 or whatever it

>> takes smaller arrays! You can easily modify the memtest program to have

>> it return the available memory.

>

> Maybe this is a dumb question, but where did you find MEMTEST?

> A search of the ITTVIS web page and user contrib sites turns

> up nothing (which, I admit, doesn't prove it's not there, but...).

>

> 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.")

It was posted in this group, so i guess I can repost it.

pro memtest

```
compile_opt idl2 ; set default integers to 32-bit and enforce [] for  
indexing
```

```
MB = long64(2)^20
```

```
currentBlockSize = MB * 2047 ; 2 GB
```

```
print,'current block size = ',currentblocksize
```

```
maxIterations = 10 ; Max loop iterations
```

```
memPtrs = ptrarr(maxIterations)
```

```
memBlockSizes = ulonarr(maxIterations)
```

```
for i=0, maxIterations-1 do begin
```

```
  ; Error handler
```

```
  catch, err
```

```
  ; Sepcifically designed for "Failure to allocate memory..." error
```

```
  if (err ne 0) then begin
```

```
    currentBlockSize = currentBlockSize - MB ; ...try 1 MB smaller  
allocation
```

```
    if (currentBlockSize lt MB) then break ; Give up, if currentBlockSize
< 1 MB
    endif

; This 'wait' enables Ctrl-Break to interrupt if necessary (Windows).
wait, 0.0001

; Allocate memory (if possible)
memPtrs[i] = ptr_new(bytarr(currentBlockSize, /nozero), /no_copy)
memBlockSizes[i] = currentBlockSize ; Store the latest successful
allocation size

; Print the current allocated block size and the running total, in Mb
print, format=('%"Memory block #%2d: %6d Mb (total: %4d Mb)"', $
i + 1, ishft(currentBlockSize, -20),
ishft(ulong(total(memBlockSizes)), -20)
endfor

ptr_free, memPtrs
end
```

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