
Subject: Re: Getting memory overflow on array concat; why?

Posted by [ryba](#) on Wed, 25 Jan 1995 14:54:25 GMT

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In article <3g3oem\$43@umd5.umd.edu>, bleau@umdsp.umd.edu writes:

|> Here's the relevant code fragment, which is within a loop:

```
|>   READF, 1, temp
|>   IF first THEN BEGIN
|>     data = temp
|>     first = "
|>   ENDIF ELSE BEGIN
|>     data = [data,temp]
|>   ENDELSE
```

Larry (and others),

A few IDL tips....

1) Use the TEMPORARY() function whenever possible when handling large arrays. Read the docs for the details, but the line:

```
data = [temporary(data),temp]
```

in place of what you have will halve your memory usage.

2) To reduce fragmentation, allocate in blocks...using code like:

```
data = fltarr(50, npar)
cursize = 50L ; Note use of longs here....
npts = 0L
while not eof(1) then begin
  readf, 1, temp
  data(npts, *) = temp
  npts = npts + 1
  if npts eq cursize then begin
    data = [temporary(data), fltarr(50, npar)]
    cursize = cursize + 50
  endif
endwhile
```

```
data = (temporary(data))(0:npts, *)
```

3) You may wish to use a more general-purpose reader routine, like DDREAD written by Fred Knight. I believe it's now in the meteo archive; if not, mail me and I'll post it. It will read any tabular file, skipping over comment lines, etc. with optional arguments specifying rows and columns to pick out...I use it constantly.

--

Dr. Marty Ryba | Generation X:
MIT Lincoln Laboratory | Too young to be cynical,
ryba@ll.mit.edu | too old to be optimistic.
Of course nothing I say here is official policy, and Laboratory affiliation is
for identification purposes only, blah, blah, blah....
