Subject: Re: Limiting concatenation IDL 5.5
Posted by Randall Skelton on Tue, 25 Jun 2002 16:31:22 GMT
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Sorry... it seems I was wrong about the number of levels of concatenation being increased. The seg. fault still exists.

On Tue, 25 Jun 2002, Randall Skelton wrote:

```
Hi all,
Having just re-read the dimensional juggling tutorials posted by JD, I
noticed that in IDL 5.5 (Linux) the limit to the practical concatenation
dimension was increased from 3 up to 8;) Being one of those people who
occasionally use more than 3 dimensions, this makes my life a whole lot
easier.
Of course, don't try and go for 9...
IDL> a = findgen(20)
IDL> print, [[[[[[[[[a]]]]]]]]]
Segmentation fault
Does anyone else observe the same?
Cheers,
Randall
```

Subject: Re: Limiting concatenation IDL 5.5
Posted by Randall Skelton on Tue, 25 Jun 2002 17:06:20 GMT
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Ok... I have to ask. Is there actually a nice, clean way to concatenate multidimensional arrays in IDL?

```
a = make_array(2,2,2,2)
b = make_array(2,2,2,5)
data1 = [ [[[a]]] , [[[b]]] ]
```

Obviously the above fails, but what is the solution? Surely some combination of rebin/reform...

On Tue, 25 Jun 2002, Randall Skelton wrote:

```
> Date: Tue, 25 Jun 2002 16:49:26 +0100
> From: Randall Skelton <rhskelto@atm.ox.ac.uk>
> Newsgroups: comp.lang.idl-pvwave
> Subject: Limiting concatenation IDL 5.5
> Hi all,
> Having just re-read the dimensional juggling tutorials posted by JD, I
> noticed that in IDL 5.5 (Linux) the limit to the practical concatenation
> dimension was increased from 3 up to 8;) Being one of those people who
> occasionally use more than 3 dimensions, this makes my life a whole lot
> easier.
> Of course, don't try and go for 9...
> IDL> a = findgen(20)
> IDL> print, [[[[[[[a]]]]]]]]]
> Segmentation fault
> Does anyone else observe the same?
> Cheers.
> Randall
```

Subject: Re: Limiting concatenation IDL 5.5 Posted by thompson on Thu, 27 Jun 2002 22:46:51 GMT View Forum Message <> Reply to Message

Randall Skelton <rhskelto@atm.ox.ac.uk> writes:

```
Ok... I have to ask. Is there actually a nice, clean way to concatenate > multidimensional arrays in IDL?
> a = make_array(2,2,2,2)
> b = make_array(2,2,2,5)
> data1 = [ [[[a]]] , [[[b]]] ]
> Obviously the above fails, but what is the solution? Surely some > combination of rebin/reform...
How about
c = make_array(2,2,2,7)
```

>

```
c(0,0,0,0) = a

c(0,0,0,2) = b
```

Of course, you'd want to put this into a routine, with calls to SIZE(), etc.

Bill Thompson

```
Subject: Re: Limiting concatenation IDL 5.5
Posted by Dick Jackson on Fri, 28 Jun 2002 05:11:17 GMT
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"William Thompson" <thompson@orpheus.nascom.nasa.gov> wrote in message
news:afg4kr$hlu$1@skates.gsfc.nasa.gov...
> Randall Skelton <rhskelto@atm.ox.ac.uk> writes:
>> Ok... I have to ask. Is there actually a nice, clean way to
concatenate
>> multidimensional arrays in IDL?
>> a = make_array(2,2,2,2)
>> b = make_array(2,2,2,5)
>> data1 = [ [[[a]]] , [[[b]]] ]
>> Obviously the above fails, but what is the solution? Surely some
>> combination of rebin/reform...
> How about
> c = make_array(2,2,2,7)
> c(0,0,0,0) = a
> c(0,0,0,2) = b
> Of course, you'd want to put this into a routine, with calls to
SIZE(), etc.
[Uh, David, make sure Bill gets a seat on the board of that IDL Experts'
group.]
Nice point, Bill! Your idea takes a bit of hackery, I'll take a swipe at
some of it:
concatSize = Size(a)
concatSize[dim+1] = concatSize[dim+1] + (Size(b))[dim+1]
c=Make_Array(Size=concatSize)
nDims=Size(a,/N_Dimensions)
aDims=Size(a,/Dimensions)
```

```
; This needs to be generalized for all
; possible values of nDims from 1 to 8, (4 assumed)
; either by a CASE statement or tricky
; string handling and Execute():
c[0, 0, 0, 0] = a
c[dim eq 0 ? aDims[0] : 0, $
 dim eq 1 ? aDims[1]: 0, $
 dim eq 2 ? aDims[2]: 0, $
 dim eq 3 ? aDims[3]: 0]=b
Cheers,
-Dick
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Calgary, Alberta, Canada
                           / +1-403-242-7398 / Fax: 241-7392
```