
Subject: Re: Concatenate elements of string array
Posted by [kluegel](#) on Tue, 10 Aug 1999 07:00:00 GMT
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In article <70o5ds\$c9c@post.gsfc.nasa.gov>,
fireman@mcst.gsfc.nasa.gov (Gwyn Fireman) wrote:

```
> IDL> string_array=['one ','string ','split ','into ','many ','array  
elements']  
> IDL> help,string_array & print,string_array  
> STRING_ARRAY  STRING  = Array[6]  
> one string split into many array elements  
> IDL> byte_array=byte(string_array)  
> IDL> byte_array=reform(byte_array,n_elements(byte_array))  
> IDL> byte_array=byte_array[where(byte_array ne 0)]  
> IDL> one_string=string(byte_array)  
> IDL> help,one_string & print,one_string  
> ONE_STRING    STRING  = 'one string split into many array  
elements'  
> one string split into many array elements
```

Clever. Reminiscent of APL.

Playing with your approach, I see the BYTE(string_array) produces a 2D array where one dimension is the number of characters in the longest string of the original 1D array. So a nasty case would be an array of strings where one string was very long and all the others were short. This would make the intermediate 2D array very big.

Another limitation is that we must make a rule that no strings may contain any nul characters.

Something tells me this is all the better that can be done with array-based approaches. But just in case... Any other ideas out there?

-- Tom Kluegel

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Subject: Re: Concatenate elements of string array
Posted by [fireman](#) on Tue, 10 Aug 1999 07:00:00 GMT
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kluegel@lanl.gov wrote:
: Does anyone out there have a clever idea on how to

: concatenate all elements of a one dimensional array
: of strings?

I don't know how clever this is, but it worked for me:

```
IDL> string_array=['one ','string ','split ','into ','many ','array elements']
IDL> help,string_array & print,string_array
STRING_ARRAY  STRING  = Array[6]
one string split into many array elements
IDL> byte_array=byte(string_array)
IDL> byte_array=reform(byte_array,n_elements(byte_array))
IDL> byte_array=byte_array[where(byte_array ne 0)]
IDL> one_string=string(byte_array)
IDL> help,one_string & print,one_string
ONE_STRING    STRING  = 'one string split into many array elements'
one string split into many array elements
```

PLEASE would someone outside of gsfc let me know if you see this!
I've been having all sorts of trouble posting lately.
Tia.

--
-- Gwyn F. Fireman
-- General Sciences Corporation / MODIS Characterization Support Team
-- Gwyn.Fireman@gsfc.nasa.gov 301-352-2118

Subject: Re: Concatenate elements of string array
Posted by [Ruhaltinger Norbert](#) on Wed, 11 Aug 1999 07:00:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

kluegel@lanl.gov wrote:

>
> Does anyone out there have a clever idea on how to
> concatenate all elements of a one dimensional array
> of strings? Of course, explicit looping is the
> obvious way to do it, but approaches using array
> manipulation tend to be more efficient. Any
> array-based approaches out there?
>
> Thanks for any ideas.
>

string can be used like sprintf in C
You have to create the Format specification on the fly

```
IDL> string_array=['one ','string ','split ','$
'into ','many ','array elements']
```

```
IDL> help,string_array & print,string_array
STRING_ARRAY  STRING  = Array[6]
one string split into many array elements
```

```
IDL> one_string = string(string_array, $
  format = '(' + string(n_elements(string_array)) + 'A')
```

```
IDL> help,one_string & print,one_string
```

```
ONE_STRING    STRING  = 'one string split into many array elements'
one string split into many array elements
```

--

to reply, change the 'SIG' at the end of my adress to 'at' - thx!
