## Subject: Re: STRING with FORMAT keyword and REFORM Posted by btt on Wed, 11 Jan 2006 15:55:33 GMT

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Bruce Bowler wrote:
> On Wed, 11 Jan 2006 10:11:47 -0500, Ben Tupper put fingers to keyboard and
> said:
>
>> Hello All,
>>
>> I just bumped into a funny thing. When calling
>> result = STRING(array, FORMAT = '(something'))
>> a 2d array is reformed into a 1d array.
>> Here's an example...
>>
>> print, !VERSION
>> ;{ ppc darwin unix Mac OS X 6.2 Jun 20 2005
                                                  32
                                                        32}
>> number = REBIN(INDGEN(1,10), 10,10)
>> text = STRING(number, FORMAT = '(I2.2)')
>> help, number, text
>>
>> ;NUMBER
                   INT
                           = Array[10, 10]
>> ;TEXT
                           = Array[100] <<<< reformed, nuts!
                STRING
>>
>> text = STRING(number)
>> help, number, text
>> ;NUMBER
                   INT
                           = Array[10, 10]
>> :TEXT
                STRING
                           = Array[10, 10] <<<< not reformed
>> text = STRING(text, format = '(I2.2)')
>> help, number, text
>>
>> ;NUMBER
                   INT
                           = Array[10, 10]
>> ;TEXT
                          = Array[100] <<< still reformed
                STRING
>>
>> I can re-reform the array, but nothing pops out at me from the online
>> help about this. Is this expected behavior?
>>
>> Thanks,
>> Ben
> Well since IDL formats are similar to FORTRAN formats, it doesn't surprise
```

```
    me. If you were to use that format statement in FORTRAN, you'd get 100
    lines of output. I think you really want to use a format of '(10I2.2)' or
    '10(I2.2)'. See the section in "Building IDL apps" called "Using
    explicitly formatted I/O" starting at page 161 (at least that's where it
    is in my V5 doc set :-)
    Bruce
```

Hi Bruce,

Maybe we should have a cup-and-string communication system between our desks instead of the newsgroup.

Those were good ideas - but neither of the options worked.

```
IDL> number = REBIN(INDGEN(1,10), 10,10)
IDL> text = STRING(number, FORMAT = '(10I2.2)')
IDL> help, number,text
NUMBER INT = Array[10, 10]
TEXT STRING = Array[10]
IDL> text = STRING(number, FORMAT = '(10(I2.2))')
IDL> help, number,text
NUMBER INT = Array[10, 10]
TEXT STRING = Array[10]
```

Here's what I found in the Building Apps guide regarding string processing on non-scalars...

"If the argument is an array instead of a scalar, the function returns an array result with the same structure as the argument. Each element of the result corresponds to an element of the argument."

It makes me think it is a bug, but I'm not sure since the FORMAT keyword has a lot more features than I can wrap my brain around. In fact, given my history, I am sure that it will turn out to NOT be a bug since I think it might be a bug. You follow me on that?

Thanks, Ben