Subject: Re: Foreach philosphy
Posted by Michael Galloy on Wed, 24 Nov 2010 21:05:01 GMT
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On 11/24/10 1:55 PM, wlandsman wrote:
> So I am trying to modernize my code by replacing FOR loops with the
> FOREACH syntax when appropriate.
                                         That way one doesn't have to
> worry about counting the number of elements, the code seems more
> readable, and it even works for temporary arrays such as arr[*,
> 3,*1.
>
> But is it correct that you can't use the FOREACH syntax to update an
            For example, is there way to use FOREACH for the
> array?
> following code snippets?
>
    IDL> for i=0,N_elements(a)-1 do a[i] = b[i]
> or even
    IDL> for i=0,N_elements(a)-1 do a[i] = 17
>
>
> FOREACH doesn't give access to the counting index, and since array
```

> elements are accessed by value, the following doesn't work

IDL> a = [1,2,3]
IDL> foreach element, a do element=17
IDL> print,a
1 2 3

You \*can\* get access to the counting index with FOREACH:

```
IDL > arr = findgen(10)
IDL> foreach a, arr, i do print, a, i
    0.00000
                   0
    1.00000
                   1
    2.00000
                   2
                   3
    3.00000
    4.00000
                   4
                   5
    5.00000
    6.00000
                   6
    7.00000
                   7
    8.00000
                   8
                   9
    9.00000
```

And you can modify an array that you are looping through:

```
IDL> arr2 = 2. * findgen(10)
IDL> foreach a, arr, i do arr[i] = arr2[i]
```

Mike

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