
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,*].

>

> But is it correct that you can't use the FOREACH syntax to update an
> array? For example, is there way to use FOREACH for the
> 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
3.00000	3
4.00000	4
5.00000	5
6.00000	6
7.00000	7
8.00000	8
9.00000	9

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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