
Subject: Accessing numbered arrays

Posted by [Richard Morton](#) on Thu, 14 Apr 2016 11:55:54 GMT

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Hi,

I have a routine (not mine) that creates numbered arrays as output, i.e., array1 , array2, array3, etc.

I would like to access these arrays sequentially within a for loop.

I am currently using:

```
FOR i=0,n DO temp=scope_varfetch('array'+strtrim(i,2)) .
```

This does the job but is this an appropriate way to do it? From my reading about scope_varfetch it appears to be designed for accessing variables at different levels of the code. This is not what I doing, so I wondered if there was another method.

If a similar question has been answered before I apologise, I couldn't find anything.

Cheers,
Richard

Subject: Re: Accessing numbered arrays

Posted by [wlandsman](#) on Thu, 14 Apr 2016 12:56:12 GMT

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Traditionally, one would use EXECUTE() for this.

There might be cases where using EXECUTE() would be faster because one doesn't necessarily need to make a copy of the array. For example, if all you need is the maximum of the array then

```
res = EXECUTE('amax = max(temporary(array' + strtrim(i,2) + '))' )
```

gets the maximum, and deletes the array without ever having to make a duplicate copy.

But I think for most cases SCOPE_VARFETCH would work just as well. (Also note that EXECUTE() can't be used with the virtual machine, but SCOPE_VARFETCH can).

On Thursday, April 14, 2016 at 7:55:57 AM UTC-4, Richard Morton wrote:

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> Cheers,
> Richard

Subject: Re: Accessing numbered arrays
Posted by [greg.addr](#) on Thu, 14 Apr 2016 13:01:11 GMT
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Sounds a reasonable solution to me. The appropriate way would have been for the author of the routine not to produce output like that.

cheers,
Greg

Subject: Re: Accessing numbered arrays
Posted by [Richard Morton](#) on Fri, 15 Apr 2016 07:46:37 GMT
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Great, thanks for the advice. In this case I need the entire array but will bear EXECUTE in mind for other tasks.

Subject: Re: Accessing numbered arrays
Posted by [wlandsman](#) on Fri, 15 Apr 2016 15:11:17 GMT
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On Friday, April 15, 2016 at 3:46:40 AM UTC-4, Richard Morton wrote:
> Great, thanks for the advice. In this case I need the entire array but will bear EXECUTE in mind for other tasks.

Just a quick note that you can get the entire array with EXECUTE(). Instead of

FOR i=0,n DO temp=scope_varfetch('array'+strtrim(i,2))

you would write

```
FOR i=0,n DO res=execute('temp = array'+strtrim(i,2))
```
