## Subject: Re: Constant Size Array in Class Init Posted by David Fanning on Mon, 23 May 2011 21:32:38 GMT View Forum Message <> Reply to Message

## Chris Williams writes:

```
> I am creating a class that holds multidimensional data of several
> different arrays. What I am trying to do is create a class to hold the
> arrays, and then define the array sizes in the init function since
> they will be different sizes.
>
  For example, I want to do something like this
>
 FUNCTION myclass:init, dim1, dim2, dim3
>
  myarray = dblarr(dim1, dim2, dim3)
>
> RETURN,1
> END
> PRO myclass__define
  void = {myclass, myarray :dblarr } ;NO SIZE ON ARRAY
> RETURN
> END
>
> However, I get a conflicting data structure error without first
> defining the size of the array in the procedure myclass define. Is
> there an empty array object that allows me to define the array size at
> initialization and not at object creation?
You are going to have to define this field as a pointer
to an array in IDL.
  void = {myclass, myarray :ptr_new() } ;NO SIZE ON ARRAY
Then.
  myArray = Ptr_New(dblarr(dim1,dim2,dim3))
  Help, *myArray
Cheers.
David
```

```
Subject: Re: Constant Size Array in Class Init
Posted by Chris Williams on Mon, 23 May 2011 21:59:20 GMT
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```

```
On May 23, 5:32 pm, David Fanning <n...@idlcoyote.com> wrote:
> Chris Williams writes:
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>> different arrays. What I am trying to do is create a class to hold the
>> arrays, and then define the array sizes in the init function since
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>
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>
>
> Then.
>
    myArray = Ptr_New(dblarr(dim1,dim2,dim3))
>
    Help, *myArray
>
```

```
Cheers,
David
---
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming:http://www.idlcoyote.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")
```

Hmm, now I get "Pointer expression not allowed in this context" when entering the initialization function.

Subject: Re: Constant Size Array in Class Init
Posted by Chris Williams on Mon, 23 May 2011 22:03:47 GMT
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```
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On May 23, 5:32 pm, David Fanning <n...@idlcoyote.com> wrote:
> Chris Williams writes:
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```
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>
>
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>
    myArray = Ptr_New(dblarr(dim1,dim2,dim3))
>
    Help, *myArray
>
> Cheers,
>
> David
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.idlcoyote.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")
```

I just realized that all the fields of the class are private by default and there is no way I am going to write 50 setters and getters for a data storage class. I'm just going to do what I need to do in python.

Thanks a ton David.

Subject: Re: Constant Size Array in Class Init Posted by penteado on Mon, 23 May 2011 22:11:02 GMT View Forum Message <> Reply to Message

On May 23, 7:03 pm, Chris Williams <fam36boozl...@gmail.com> wrote:

- > I just realized that all the fields of the class are private by
- > default and there is no way I am going to write 50 setters and getters
- > for a data storage class. I'm just going to do what I need to do in
- > python.

Just a couple of ideas:

It does not have to be 100 functions. It can be just two (get/ setproperty), either each one with 50 arguments, or just one argument, with uses of execute() or scope\_varfetch().

But in this case maybe just putting an extra layer would be more convenient. You can group everything into a single container (by a pointer, a structure, a hash or a list, whichever is more convenient), and then pass just that one container with get/setproperty.

## Subject: Re: Constant Size Array in Class Init Posted by David Fanning on Mon, 23 May 2011 22:16:59 GMT

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- > Hmm, now I get "Pointer expression not allowed in this context" when
- > entering the initialization function.

Did you restart IDL after you changed the class definition?

Cheers,

David

--

David Fanning, Ph.D. Fanning Software Consulting, Inc.

Covote's Guide to IDL Programming: http://www.idlcovote.com/

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: Constant Size Array in Class Init Posted by David Fanning on Mon, 23 May 2011 22:18:53 GMT View Forum Message <> Reply to Message

## Chris Williams writes:

- > I just realized that all the fields of the class are private by
- > default and there is no way I am going to write 50 setters and getters
- > for a data storage class. I'm just going to do what I need to do in
- > python.

Goodness, I wouldn't write 50 getters and setters either!! Sounds like JAVA to me. :-)

Cheers,

David

\_\_

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: http://www.idlcoyote.com/

Sepore ma de ni thui. ("Perhaps thou speakest truth.")