Subject: idl\_conatiner::get and position Posted by btt on Thu, 24 Feb 2005 21:58:57 GMT

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Oh dear.

When GETting objects in a container the POSITION keyword specifies the location of the objects needed. But they aren't returned in that order. They are returned in the order they are stored (first in - first out).

Is there a way around this other than writing a method override?

Here's an example.

```
x = obj_new('idl_container')
for i = 0, 5 do x->Add, obj_new('idlgrmodel')
arr = x->Get(/all)
for i = 0, 5 do print, arr[i]
<ObjHeapVar847(IDLGRMODEL)> <<<< note the order</p>
<ObjHeapVar849(IDLGRMODEL)>
<ObiHeapVar851(IDLGRMODEL)>
<ObiHeapVar853(IDLGRMODEL)>
<ObjHeapVar855(IDLGRMODEL)>
<ObiHeapVar857(IDLGRMODEL)>
y = x->get(position = [3,2,1]) <<<<< note the position order
for i = 0, 2 do print, y[i]
<ObjHeapVar849(IDLGRMODEL)> <<<< note the order
<ObjHeapVar851(IDLGRMODEL)>
<ObjHeapVar853(IDLGRMODEL)>
Any ideas?
Thanks.
Ben
                                                   32}
{ ppc darwin unix Mac OS X 6.1.1 Oct 11 2004
```

Subject: Re: idl\_conatiner::get and position
Posted by David Fanning on Mon, 28 Feb 2005 15:23:46 GMT
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Ben Tupper writes:

- > Interesting. I haven't had the need to preserve the space occupied by a removed
- > object.

>

- > Here's how I think I'll handle to first-in first-out ordering (or at least
- > something like this.)

Well, did you try that? :-)

At first glance, it looks like you are going to have the same problem. I think your loop will have to go like this:

FOR j=(NP-1),0,-1 DO

Otherwise, your indexing will get screwed up again, won't it? I don't have time to check this morning, alas. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

Subject: Re: idl\_conatiner::get and position Posted by btt on Mon, 28 Feb 2005 16:45:54 GMT

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## David Fanning wrote:

- > Ben Tupper writes:
- >
- >
- >> Interesting. I haven't had the need to preserve the space occupied by a removed
- >> object.
- >>
- >> Here's how I think I'll handle to first-in first-out ordering (or at least
- >> something like this.)
- >
- >
- > Well, did you try that? :-)
- > At first glance, it looks like you are going to have
- > the same problem. I think your loop will have to go
- > like this:

```
>
    FOR j=(NP-1),0,-1 DO
>
> Otherwise, your indexing will get screwed up again, won't it?
> I don't have time to check this morning, alas. :-)
>
I always get that sinking feeling when you ask if I'm sure. But in this case I'm
 fully 3.93% confident that I am ok on this. Here's an example. Compile it,
then run the TEST_MYCONTAINER. Here's what I get for output...
IDL> test myContainer
FIFO order
<ObjHeapVar779(IDLGRFONT)> < this shows the First-In First-out order [0,2,3]</p>
<ObjHeapVar783(IDLGRFONT)>
<ObjHeapVar785(IDLGRFONT)>
NoSort order
<ObjHeapVar785(IDLGRFONT)> < this shows the desired order [3,0,2]</p>
<ObjHeapVar779(IDLGRFONT)>
<ObjHeapVar783(IDLGRFONT)>
:****BEGIN CODE
PRO Test_MyContainer
myCon = OBJ NEW('myContainer')
For i = 0, 5 do myCon->Add, OBJ NEW('IDLgrFont')
fifo = myCon->Get(position = [3,0,2])
Print, 'FIFO order'
For i = 0, 2 do print, fifo[i]
Print, "
myOrder = myCon->Get(position = [3,0,2], /NOSORT)
Print, 'NoSort order'
For i = 0, 2 do print, myOrder[i]
OBJ DESTROY, myCon
END
FUNCTION myContainer::Get, $
  COUNT = count, $
  NOSORT = nosort, $
  POSITION = position, $
```

```
EXTRA = extra
nP = n_elements(position)
If keyword_Set(NoSort) AND (nP GT 1) Then Begin
 arr = objarr(nP)
For i = 0, nP-1 Do $
   arr[i] = self->Get(position = position[i], _EXTRA = extra)
  count = nP
EndIf Else Begin
  arr = $
   self->IDL_CONTAINER::Get(position = position, $
     COUNT = count, EXTRA = extra)
EndElse
Return, arr
END
FUNCTION myContainer::Init
Return, self->IDL CONTAINER::Init()
END
PRO myContainer::Cleanup
Self->IDL CONTAINER::Cleanup
END
PRO myContainer__Define, class
class = {myContainer, INHERITS IDL CONTAINER}
END
:****FINI CODE
```

Subject: Re: idl\_conatiner::get and position
Posted by David Fanning on Mon, 28 Feb 2005 17:16:55 GMT
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## Ben Tupper writes:

- > I always get that sinking feeling when you ask if I'm sure. But in this case I'm
- > fully 3.93% confident that I am ok on this. Here's an example. Compile it,
- > then run the TEST\_MYCONTAINER. Here's what I get for output...

Oh, right, sorry. I thought for some reason we were doing REMOVE and not GET. Yes, GET will not change the order of the index, since it is not removing anything from the container.

Cheers.

## David

David Fanning, Ph.D. Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.dfanning.com/