

---

Subject: Ptr\_Wrapper (Useful?)

Posted by [gambler\\_1650](#) on Tue, 23 Nov 2004 16:01:35 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Greetings all. One of the first pieces of 'useful' code I wrote was an object that encapsulates pointer creation and deletion. It's a piece of simple code that utilizes David Fanning's "linkedlist". Everytime a pointer is created using the object, it's attached to a linked list. When the object is destroyed, the linked list is unwound and each pointer in the list is freed. There is also an explicit "free\_ptrs" routine that allows destruction to be more controlled. The simplest way of using it is to create one ptr\_wrapper object in each \*.pro file and destroy it at the end. If you prefer to have different wrappers, each of which maintains its pointers for more specialized time frames for better efficiency, you can do that too. And finally, you can create and free pointers using the object methods just as you would normally in IDL.

Quick example:

PRO testptrs

```
oPtr_Wrapper = Obj_New('ptr_wrapper')
ptrA = oPtr_Wrapper->Ptr_New(/ALLOCATE_HEAP) ; Uses same keywords
as Ptr_New
```

```
.
.
.
```

```
ptrB = oPtr_Wrapper->Ptr_New(/ALLOCATE_HEAP)
```

```
.
.
.
```

```
Obj_Destroy, oPtr_Wrapper
```

END

This bit of code is obviously simplistic and using the wrapper here would be wasteful. I've found it to be much more useful in objects where pointers are created in different routines. Each can be assigned to self.oPtr\_Wrapper and then self.oPtr\_Wrapper can be destroyed in the cleanup routine...

If there's interest in the code, I'll be happy to e-mail the file or submit it to the RSI site.

---

Subject: Re: Ptr\_Wrapper (Useful?)

Posted by [Stein Vidar Hagfors H\[2\]](#) on Tue, 23 Nov 2004 19:54:47 GMT

[View Forum Message](#) <> [Reply to Message](#)

---

Nice - I see those books you recommended (thanks for the writeup, by the way - didn't want to waste bandwidth for that alone, but here you go :-)

I would definitely find something like that useful! (Others should, too!)

gambler\_1650@yahoo.com (Robert Gamble) writes:

```
> Greetings all. One of the first pieces of 'useful' code I wrote was
> an object that encapsulates pointer creation and deletion. It's a
> piece of simple code that utilizes David Fanning's "linkedlist".
> Everytime a pointer is created using the object, it's attached to a
> linked list. When the object is destroyed, the linked list is unwound
> and each pointer in the list is freed. There is also an explicit
> "free_ptrs" routine that allows destruction to be more controlled.
> The simplest way of using it is to create one ptr_wrapper object in
> each *.pro file and destroy it at the end. If you prefer to have
> different wrappers, each of which maintains its pointers for more
> specialized time frames for better efficiency, you can do that too.
> And finally, you can create and free pointers using the object
> methods just as you would normally in IDL.
>
> Quick example:
>
> PRO testptrs
>
>   oPtr_Wrapper = Obj_New('ptr_wrapper')
>   ptrA = oPtr_Wrapper->Ptr_New(/ALLOCATE_HEAP) ; Uses same keywords
>   as Ptr_New
>
>   .
>   .
>   .
>
>   ptrB = oPtr_Wrapper->Ptr_New(/ALLOCATE_HEAP)
>   .
>   .
>   .
>   Obj_Destroy, oPtr_Wrapper
>
> END
>
>
```

> This bit of code is obviously simplistic and using the wrapper here  
> would be wasteful. I've found it to be much more useful in objects  
> where pointers are created in different routines. Each can be  
> assigned to self.oPtr\_Wrapper and then self.oPtr\_Wrapper can be  
> destroyed in the cleanup routine...  
>  
> If there's interest in the code, I'll be happy to e-mail the file or  
> submit it to the RSI site.  
>  
> Robert Gamble

--

-----  
Stein Vidar Hagfors Haugan  
ESA SOHO SOC/European Space Agency Science Operations Coordinator for SOHO

NASA Goddard Space Flight Center, Tel.: 1-301-286-9028  
Mail Code 682.3, Bld. 26, Room G-1, Cell: 1-240-354-6066  
Greenbelt, Maryland 20771, USA. Fax: 1-301-286-0264  
-----

---

Subject: Re: Ptr\_Wrapper (Useful?)  
Posted by [gambler\\_1650](#) on Wed, 24 Nov 2004 15:42:19 GMT  
[View Forum Message](#) <> [Reply to Message](#)

Thanks for the responses. I'll have to look into the Heap\_free routine in more detail than I have. I've posted the file to the RSI site, should be up in a day or so. Just as a reminder, the code relies on David Fanning's "linkedlist\_define.pro".

Robert Gamble

---

Subject: Re: Ptr\_Wrapper (Useful?)  
Posted by [gambler\\_1650](#) on Tue, 30 Nov 2004 16:41:56 GMT  
[View Forum Message](#) <> [Reply to Message](#)

Just a note for anyone interested... The Ptr\_Wrapper is now on the rsinc site for download under Utilities.