## Subject: Re: IDL Save Object Resoration Posted by Jim Pendleton on Tue, 21 Apr 2015 13:01:57 GMT

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On Tuesday, April 21, 2015 at 5:17:04 AM UTC-6, David B wrote:
> Suppose I create a variable:
>
> ;Create arrays
> a = [1,2,3,4,5,6]
> b = [7,8,9,10]
> c = INDGEN(10,10)
>
> ;Save these arrays normally
> save, a, b, c, filename = 'file.sav'
>
> :Run a reset
> .reset
> ;Restore these variables, but into an object
> sobj= OBJ NEW('IDL Savefile', 'file.sav')
>
> :Extract names
> names = sObj->Names()
> :Print
> Print, names
> The problem is that I need the variables to be named something differently, but I cannot extract
the variables into a new name. Non of my objects are heap variables, just standard variables.
 For example, following this:
>
  http://www.exelisvis.com/docs/idl_savefile restore.html#obj ects_misc_904195448_1034949
> One can restore Pointers and Objects into a new object/pointer, so you can automatically
rename your variables on the fly with the line:
> ; Restore the heap variable, associating it with a new regular
> ; variable. Note that ptrName is (in this case) a one-element array.
> sObj->Restore, ptrName[0], /POINTER_HEAPVAR, NEW_HEAPVAR=myNewPtr
  ______
> I have an almost solid reason for doing this in my case. What I am therefore saying is that I
want for example (but I cannot do this, because 'new variable' is not an option in the restore
```

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method!)
> FOR i = 0, n_elements(names)-1, 1 DO BEGIN
>
      sobj->Restore, names[i], new_variable = 'new_'+names[i]
>
  ENDFOR
  SO I end up with the following as a result:
>
> new a = a
> new b = b
> new_c = c
> Where I can restore a simple variable, like an array, into a new name. I may be missing the
point here but I cannot think of a way to do this in a strait forward way, and the 'EXECUTE'
command is out of the question for these objects.
> Clearly I am being stupid, but I really am stuck. Also, I know this method does not work as:
>
> new = obj->Restore, names[i], new_variable = 'new_'+names[i]
> otherwise, my problem would be solved easily. Can anyone offer insight into this and point out
my mistake?
 Thanks much
> David
Why not wrap your Restore call in a procedure and use the names you want as parameter or
keyword arguments?
pro myrestore, sObj, a = a, b = b, ...
sobj->restore, a, ...
end
pro mymain
sobj = idl savefile(...)
myrestore, sobj, a = new_a, b = new_b, ...
help, new_a, new_b, ...
end
If you're going to generate the new names on the fly, you might want to consider using a hash
instead.
```

Jim P.