Subject: Objects, File Names, and the Save command.
Posted by J.D. Smith on Wed, 22 Jul 1998 07:00:00 GMT
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I am exploring a very promising use of the save/restore commands in conjuction with objects. Given some complex object which contains a host of different types of data (with pointers, etc.), as part of a class method, one adds:

save, self, FILENAME=fname

to register on disk an accurate snapshot of the object. To restore, later, use:

restore,pname,RESTORED_OBJECTS=obj,/RELAXED_STRUCTURE_ASSIGN MENT

and the object is in obj, but also brought back as the local variable *self*. I'm not sure the relaxed structure assignment flag works for objects, but I don't see why it wouldn't. So this can be used in two ways ...

1. To allow an object to replace *itself* with another, perhaps older copy (or even an altogether different type of object -- but the utility of self-transmogrifying objects is not yet apparent to me). This works because the implicit self variable is passed by reference (as it has to be). This will lead to at least one unreferenced heap variable unless garbage collection steps are taken, i.e. by saying:

```
oldself=self
restore, pname,/RELAXED_STRUCTURE
obj_destroy,oldself
```

2. To allow a program module to load up an object on the fly, through the obj variable in the above statement (only one should be loaded if only one was saved).

This is all very convenient but leads to the strange situation of a loaded object in memory which exists there *before* any of the class methods, and/or the __define procedure for that object class are compiled. Therefore, the usual paradigm of putting all class methods in the __define procedure file before this procedure (suggested by RSI itself in the manual) fails. How can the method be found if the __define doesn't have to be compiled and isn't in it's own file? I would like to come up with a solution which doesn't involve a separate class__method.pro file for each method. Any ideas?

Thanks,

JD

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