
Subject: ASSOC and structures don't mix

Posted by [Brian Jackel](#) on Thu, 12 Mar 1998 08:00:00 GMT

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Recently some people have remarked that ASSOC is a useful tool for I/O. While this is true, there is a subtle problem when reading structures from a file that was not written using ASSOC. The following script demonstrates what I'm talking about. Of course, the obvious workaround is to write the files using ASSOC as well, but that is not always an option.

```
;  
;  
;IDL script to demonstrate why it's dangerous  
;to use ASSOC with structures.  
;
```

```
;  
;Make a test structure, write it out with some  
;values in it.  
;
```

```
test= {PROBLEM, a:0b, b:FLTARR(3)}  
OPENW,lun,'test.dat',/GET_LUN  
FOR indx=0,3 DO BEGIN  
    test.a= indx  
    test.b= [indx,indx+0.5,indx+1.5]  
    WRITEU,lun,test  
ENDFOR  
CLOSE,lun
```

```
;  
;Reading it back in works like a charm...
```

```
;  
OPENR,lun,'test.dat',/GET_LUN  
READU,lun,test & PRINT,test  
READU,lun,test & PRINT,test  
READU,lun,test & PRINT,test
```

```
;  
;...but the results from ASSOC aren't so good
```

```
;  
dat= ASSOC(lun,{PROBLEM})  
PRINT,dat(0)  
PRINT,dat(1)  
PRINT,dat(2)
```

```
;  
;because IDL is zero padding the structure to
```

```
;some multiple of 8 bytes (?). There's actually  
;only 13 bytes (assuming 4 byte floats).  
;  
HELP,/STR,{PROBLEM}
```

```
END
```

```
--
```

```
Brian Jackel
```
