Subject: Re: static variables
Posted by Eric Deutsch on Mon, 30 Sep 1996 07:00:00 GMT
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Esfandiar Bandari wrote:

> > Hi:

- > I am newcomer to idl and this news group! I was wondering if
- > there is any clean way of having static variables inside files or
- > functions (as in C or C++). These are variables that keep their value
- > from function call to function call and are local to the function.

I think your only option is to use common blocks. e.g.:

```
function calc1,var1,var2
common COM_CALC1,var3,var4
if (n_elements(var3) eq 0) then var3=0.0
if (n_elements(var4) eq 0) then var4=50.0
if (n_elements(var2) ne 0) then var4=var2
print,var3
var3=var3+1
return,var1*var2*var3
end
```

If calc1 is the only function that ever uses the common block COM\_CALC1 then, var3,var4 work essentially like static variables. Note that there is

the option of other functions/procedures also using this common block which then makes var3,var4 a little bit more like C global variables.

Also, IDL won't let you stuff var1,var2 into a common block. In the needlessly-complicated example above, the function automatically starts counting the number of times it gets called in an IDL session, and var4 can be specified in the function call, or if left unspecified in the function call, takes on the value from the previous call (or the default of 50.0)

hope this helps, Eric		
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