Subject: Re: update variable in structure
Posted by M. Suklitsch on Tue, 16 Jun 2009 16:38:13 GMT
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On 16 Jun., 18:19, mgalloy <mgal...@gmail.com> wrote:
> M. Suklitsch wrote:
>> Hi everybody!
>
>> Today I have a question regarding the update of variables within a
>> structure, which does not work as I would expect.
>
>> Say we have a very simple program:
>
>> ===============
>> PRO update_value, input
>
>> input = input MOD 5
>
>> END
>> ===============
>
>> [In reality, this subroutine/program does some more sophisticated
>> things, but this is sufficient to prove my point. ;-)]
>
>> Okay, now we call this routine with a variable holding an integer
>> value.
>> IDL> my_value = 8
>> IDL> update_value, my_value
>> IDL> help, my_value
>> MY_VALUE INT = 3
>
>> So far, so good. Now we do exactly the same, but this time the
>> variable is embedded in a structure:
>> IDL> my_struct = {my_value:8}
>> IDL> update_value, my_value
>> IDL> help, my_struct, /STRUC
>> ** Structure <8220044>, 1 tags, length=2, data length=2, refs=1:
>> MY_VALUE INT 8
>
>> And now the rather simple question: how come this doesn't work?
>> Normally IDL is eager to overwrite variables of any kind. On some
>> occasions, I've seen it overwriting the "parental" variable of a
>> duplicated one. And more important: is there a way to get the above
>> thing working?
>
> Well, I assume you mean to refer to the field in the structure you just
> created, as in:
>

> IDL> update_value, my_struct.my_value
> IDL> help, my_struct.my_value
> <Expression> INT = 8
>
> The reason my_struct.my_value was not modified is that only "named
> variables" are passed by reference, so changes to them by the called
> routine will still be in effect at the caller level. The expression
> "my_struct.my_value" is not a named variable (named variables are just
> the name of a variable like "my_value" was in your previous examples),
> so modification to it inside update_value are only to a local variable.
>
>> Maybe important, maybe not: I'm working with IDL 7.0 and have tried it
>> on Solaris and Linux.
>
> Should not matter for this.
>
> Mike
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> Associate Research Scientist
> Tech-X Corporation

Thanks for your quick replys!
In that case I've got a problem... or rather I've to find a neat
workaround for my own work. :)

Bye,
Martin
