Subject: Re: A simple DLM question
Posted by Xin Tao on Mon, 27 Aug 2012 22:04:43 GMT
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Thanks Jimmy. That indeed solved my problem. It was so confusing to me, because I found from the External Development Guide that IDL_DELTMP should check it first. :)

On Monday, August 27, 2012 3:48:27 PM UTC-5, jimmylee...@gmail.com wrote:
> On Monday, August 27, 2012 11:13:57 AM UTC-6, Xin Tao wrote:
>
>> Hi,
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>> I'm having trouble figuring out the problem of the following DLM code:
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>
>> /* The c routine */
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>
>> void simple(int argc, IDL_VPTR argv[])
>
>>
>
>> {
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>>
>
>>   IDL_VPTR v;
>
>>
>
>>
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\>\>   v = IDL_BasicTypeConversion(1, &argv[0], IDL_TYP_DOUBLE);

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\>\>   IDL_DELTMP(v);

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\>\> }

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\>\> This routine just takes its input and convert it to double. After converting it to a DLM, however, I seem to see strange results.

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\>\> IDL> simple, 1.0d

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\>\> % Loaded DLM: TESTMODULE.

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\>\> IDL> simple, -1.0d

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\>\> Bus error

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>> That is: if I give it 1.0d as input, then the code is fine. However, if I use -1.0d, then there is a BUS error, presumably from IDL_DELTMP(v).   I really don't understand why this is the case. Isn't IDL_DELTMP supposed to decide first whether v is a temporary variable or not? If I remove IDL_DELTMP, of course, I'll frequently get the annoying warning message "% Temporary variables are still checked out - cleaning up...".
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>> Please give me some help. Thanks.
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>
> Try this:
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>
> if (v != argv[0]) IDL_DELTMP(v);
>
>
>
> That is, no conversion was necessary.
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>
> The macro (in idl_export.h, if you're interested) doesn't do extensive checking, and you should only free variables that are temps, not expressions or constants.