Subject: Re: A simple DLM question
Posted by Jim Pendleton on Mon, 27 Aug 2012 20:48:26 GMT
View Forum Message <> Reply to Message

On Monday, August 27, 2012 11:13:57 AM UTC-6, Xin Tao wrote:
> Hi,
>
>
>
> I'm having trouble figuring out the problem of the following DLM code:
>
>
>
> /* The c routine */
>
>
>
> void simple(int argc, IDL_VPTR argv[])
>
> {
>
> IDL_VPTR v;
>
>
>
> v = IDL_BasicTypeConversion(1, &argv[0], IDL_TYP_DOUBLE);
>
>
>
> IDL_DELTMP(v);
>
> }
>
>
>
> This routine just takes its input and convert it to double. After converting it to a DLM, however, I seem to see strange results.
>
>
>
> IDL> simple, 1.0d
>
> % Loaded DLM: TESTMODULE.
>
> IDL> simple, -1.0d
>
> Bus error
>

>
>
> 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...".
>
>
>
> Please give me some help. Thanks.

Try this:

if (v != argv[0]) IDL_DELTMP(v);

That is, no conversion was necessary.

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.
