Subject: Re: IDL platform difference
Posted by Christophe Marque on Thu, 25 Mar 1999 08:00:00 GMT
View Forum Message <> Reply to Message

Hubert Dietl wrote:
>
> I have noticed that IDL for Windows and IDL for MacOS seem to handle
> some calculations and/or output using float variables differently. I
> have a procedure that is carrying out a large calculation and printing
> the results to a file. When I run the same procedure on the two
> different platforms, I get two different amswers. Example:
>
> On the PC: 4.94e+009 On the Mac: 4.93e+09
>
> I expected the difference in the number of zeroes in the exponent, but
> not the change in value. Has anyone ever encountered this before? I
> understand the difference is small, but there really shouldn't be any
> difference at all. Thanks for any help.
>
> S.Thiel beorabor@bemail.com

Hi,
I have yet encountered the same problem in running a complicated program
on a Windows NT IDL and a UNIX Digital alpha IDL.

I can't easily find where programs begin to diverge.
I print the main results:
The first step is:
For Windows:
limit flux= 0.000151933
I realize 50 iterations and then:
max= 0.000129077 min=-0.000131113

For UNIX:
limit flux= 0.000113608
I realize 50 iterations and then:
max= 8.65482e-5 min= -8.74129e-5

The other steps have the same behaviour.
I thought the difference was the 2 kinds of processors:
Intel 32 bits and Dec alpha 64 bits.
The main trouble is you have the same behaviour when you use double
floats instead of floats.
--
Christophe Marque