Subject: Re: a BUG or not a BUG in IDL ?
Posted by Peter Mason on Fri, 19 Jul 1996 07:00:00 GMT
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> I have a "warning in loops" for you guys...
<see original posting for routine>
> The first loop if OK, the second loop stops after the first
> iteration, but the last loop, just keeps going forever...
>
> Any comments ?

. With IDL 4.0.1 on DEC Alpha/OSF the first 2 loops work the same as on your platform, but the third (setting counter to LONG) terminates after 10 iterations.
. On Pentium/WinNT, the behaviour is the same as for Alpha/OSF, except that a "floating point underflow" error gets reported.
. On SunOS 4.1.3, the behaviour is the same as on your platform, except that the third loop actually terminates after 655361 iterations.

Something of a worry!

Are you using a "big-endian" machine by any chance?

Just a guess, but it would appear that FOR statements might be "compiled" in such a way that there's no allowance for a change in the loop variables' types. (Maybe for a little extra speed?) And, still guessing, if the loop counter variable's type is changed within the loop, then just some of it (e.g., the 16 bits at the lowest memory address for INT counters) is used within the FOR statement. Finally, I'd guess that the FOR loop stores something back into the actual loop-counter variable in a similarly weird way. (This could account for FP loop-counters getting zapped into denormals.)

Peter Mason