Subject: Re: subtle but important Posted by Craig Markwardt on Fri, 27 Apr 2001 15:28:18 GMT View Forum Message <> Reply to Message

Randall Skelton <rhskelto@atm.ox.ac.uk> writes:

- > On Fri, 27 Apr 2001, Liam E. Gumley wrote:
- >
- >> This is a subtle but important point. DOUBLE() is a type conversion
- >> function [snip]

>

> While we are on the subject of 'subtle but important points' in IDL...

>

- > I also learned today that for integers the default length is 16-bit unless
- > you use the "COMPILE_OPT DEFINT32" statement. Try "print, 1000*1000" in
- > IDL.

That's why I often use "print, 1000L*1000L". Appending "L" to integers saves a lot of grief later on. The COMPILE_OPT approach works in newer versions, but not in IDL 5.2 or older.

Craig

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Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

Subject: Re: subtle but important Posted by Paul van Delst on Fri, 27 Apr 2001 16:12:05 GMT

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Craig Markwardt wrote:

>

- > Randall Skelton <rhskelto@atm.ox.ac.uk> writes:
- >> On Fri, 27 Apr 2001, Liam E. Gumley wrote:

>>

- >>> This is a subtle but important point. DOUBLE() is a type conversion
- >>> function [snip]

>>

>>

- >> While we are on the subject of 'subtle but important points' in IDL...
- >> I also learned today that for integers the default length is 16-bit unless
- >> you use the "COMPILE_OPT DEFINT32" statement. Try "print, 1000*1000" in
- >> IDL.

>

> Appending "L" to integers saves a lot of grief later on.

This is an understatement

Maybe it's my fortran background, but I always stick an "L" on the end of integers so I know (and others who read the code after me) that this value is a LONG (read: 4 byte) integer, even for silly stuff like

n = 3L FOR i = 0L, n - 1L DO BEGIN ENDFOR

In this case there's no need but one day someone might make "n" greater than what a 2-byte int can hold.

Don't they teach this sort of stuff (and the floating point representation stuff) in computing/science courses anymore?

paulv

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Paul van Delst A little learning is a dangerous thing; CIMSS @ NOAA/NCEP Drink deep, or taste not the Pierian spring;

Ph: (301)763-8000 x7274 There shallow draughts intoxicate the brain,

Fax:(301)763-8545 And drinking largely sobers us again.

paul.vandelst@noaa.gov Alexander Pope.