Subject: Re: Set Precision????????? Posted by Martin Schultz on Wed, 16 Jun 1999 07:00:00 GMT View Forum Message <> Reply to Message

## wbiagiot@suffolk.lib.ny.us wrote:

>

- >> However I would like to create a variable corresonding to a fraction
- > of a
- >> Year (e.g 1995.123456). I have not been able to find a procedure
- > allowing
- >> me to create 10 digit decimal number, without the number being
- > rounded
- >> off to 8 digits.
- >> Does anyone know of a way to declare a variable to hold a 10 digit
- >> decimal number?

>

- > The other replies were on the money with the correct answer, but also
- > consider this: there are only 365 days in a year. I'm pretty sure you
- > could get that resolute with even a "float" (4 byte decimal).

>

> - Bill B.

>

Bill,

you had better not hit the send button for this message!! A reply like yours is what caused the Y2K bug (admitted: it has created many jobs). Sure, if you are only after "daily" resolution, then a simple float is fine, but as soon as you want to extract seconds, you get terrible roundoff errors. And believe it or not: there are datasets in 1-second resolution (or finer) that are stored with the day of the year.

## More systematically:

1 year ~ 3e7 secs ~ 3e10 msecs ~ 3e13 usecs i.e. with 7 digits you can get to about 10 secs, with 15 digits you achieve better than microsecond resolution.

Regards, Martin

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