Subject: Re: BYTES to LONG
Posted by John-David T. Smith on Tue, 07 Nov 2000 08:00:00 GMT
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Paul van Delst wrote:
>
> Kelly Dean wrote:
>>
>> I am reading in a combination ASCII/BINARY file with USGS DLG
>> information as a binary file.
>>
>> I am able to convert the bytes into ASCII with STRING([72B, 101B, 108B,
>> 108B, 111B]).
>>
>> However, I cannot figure out how to convert the 4 bytes into LONG, whihc
>> is the UTM X and Y numbers. Any suggestions?
>>
>> Kelly
>
> If I understand your question correctly,
>
> if
>
> x = [0B, 1B, 1B, 1B]
>
> then long_x = TOTAL(ISHFT(LONG(x), [24,16,8,0]))
>
> ??
>
> This gave me long_x = 65793.0 = 65536 + 256 + 1 which seems correct, no?
>
> For some reason the TOTAL returned a floating point number? Weird. Never noticed that
> before.
>

The total() function always converts to floating point before the sum,
to avoid overflow issues. Consider:

a=total(bindgen(256))

if it did the total as bytes, that would overflow. Of course, it could
have done them as regular ints, but how should it decide, a priori? I
for one use total a lot in testing various conditions, and it always
bothered me that I had to test the floating result, but there's really
no other clean solution.

JD

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