Subject: Re: Floats
Posted by Paul Van Delst[1] on Thu, 09 Mar 2006 00:33:18 GMT
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Mark Hadfield wrote:
> Paul Van Delst wrote:
>
>> Sheldon wrote:
>>
>>>
>>> Here is a silly question: Can I define a float array and control how
>>> many decimal places are kept? For example, I want all values to only
>>> have an accuracy to the nearest 100th (20.15 and not 20.154983445).
>>> Kind of like in printing, you know, the f5.2 print definition, but only
>>> for variables and arrrays.
>>
>>
>> May I ask why? Usually this sort of thing is required for printing,
>> but not for regular old storage of numbers.
>
>
> Currency?

Ah, fair enough. But a hasty google reveals that currency calculations are not done at the cent level - a higher precision is required; for currency conversions (6sigfigs), or in calculating how much you have to pay when you buy petrol or gas etc, (1000th's seem to be the common unit.).

Another example I looked at converted 1000 Finnish Markka's to Euros 6 times (conversion rate to 6sigfig) and added the result (ï¿½1024.92). Converting 6000 Finnish Markka's was ï¿½1024.90 A 2 cent difference. That may add up when you're converting lotsa moola lotsa times.

So, it seems to me the only reason you'd need precision to 100th's for currency is for printing your invoices. :o)

cheers,

paulv

p.s. I can't believe I just read 20 pages from a report from the "EUROPEAN COMMISSION DIRECTORATE GENERAL II ECONOMIC AND FINANCIAL AFFAIRS Monetary matters". Jeez. :o)
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Paul van Delst
CIMSS @ NOAA/NCEP/EMC