Subject: Re: Floats
Posted by James Kuyper on Thu, 09 Mar 2006 11:10:17 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?

If you require exact results in cents, you shouldn't usea float number representing the number of dollars, you should use a long number representing the number of cents. You'll need to use a floating point type for intermediate calculations if you're doing things like computing compound interest. Keep in mind that FLOAT usually doesn't have enough precision for such calculations: use DOUBLE instead. However, if you want to display a long series of numbers, and print a correct total for the displayed numbers, you'd better use an integer type.
There are languages which provide direct support for fixed-point types. They use an underlying integer type to represent a number with a fixed number of digits after the decimal point. IDL isn't one of those languages.