Subject: Re: differences idl5.5 and idl5.6
Posted by Paul Van Delst[1] on Wed, 19 Feb 2003 16:56:20 GMT
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Reimar Bauer wrote:
>
> Dick Jackson wrote:
>> "Reimar Bauer" <R.Bauer@fz-juelich.de> wrote in message
>> news:3E539FE4.4000801@fz-juelich.de...
>>
>>> Hi,
>>>
>>> today I found a difference in handling infite numbers by the new
>>
>> version.
>>
>>>
>>> IDL 5.6
>>>
>>> IDL> a=1./0 &print,a,fix(a)
>>> Inf -32768
>>>
>>>
>>> IDL 5.5
>>>
>>> IDL> a=1./0 &print,a,fix(a)
>>> Inf 0
>>>
>>>
>>>
>>> So I can't say which is right both results are terrible.
>>>
>>> Now it is totally clear that this case must be tested.
>>
>>
>> I don't see any change in behaviour on Windows 2000 Pro; in 5.4, 5.5 and
>> 5.6, I get these identical results:
>>
>> IDL> a=1./0 &print,a,fix(a)
>> Inf 0
>> % Program caused arithmetic error: Floating divide by 0
>> % Program caused arithmetic error: Floating illegal operand
>>
>> Cheers,
>> --
>> -Dick
>>
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>>
>>
>
> Thanks Dick,
>
> then it seems to be a bug on linux and aix
>
> on aix the result is a bit more different,
> IDL> a=1./0 & print,a,fix(a)
> Inf -1
>
> I would prefer as result NaN!

Hmm. Wouldn't the integer form of infinity still be infinite? If you think the value of some variable may be infinite, how come you don't test the value _before_ using it in an intrinsic function (e.g. FIX()) ?

I.e.

IF (FINITE(a)) THEN a = FIX(a) ELSE a = !VALUES.F_NAN

And from the IDL docs, it would appear that there is no such thing as an integer infinity or nan (in IDL at least).

paulv

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