Subject: Re: weird behaviour of ishft
Posted by Foldy Lajos on Tue, 17 Mar 2009 09:46:13 GMT
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On Tue, 17 Mar 2009, BenHur wrote:

> Hi everyone,
>
> Can somebody explain to me, why for certain types ishft shifts only by
> modulo 32 bits?
> Example:
> DISR> print,ishft(1,[31,32])
>   0   1
> DISR> print,!version
> { x86 Win32 Windows Microsoft Windows 6.4 Mar 23 2007   32   64}
>
> I would expect ishft(1,32) = 0. Am I missing something? Is it my
> outdated IDL version or does it happen with newer versions/other
> platforms?
>
> Cheers, Ben
>

It's normal for the right shift (SHR) op on x86 processors. From the Intel manual: 'The count is masked to 5 bits, which limits the count range to 0 to 31.'

regards,
lajos

Subject: Re: weird behaviour of ishft
Posted by BenHur on Tue, 17 Mar 2009 10:37:19 GMT
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Yes, that's probably the reason behind it, thanks. However, I think the IDL documentation should apply since it's an IDL command and not a processor op. From the IDL docs:

'Syntax
Result = ISHFT(P1, P2)
Return Value
If P2 is positive, P1 is left shifted P2 bit positions with 0 bits filling vacated positions.'

There is no limit mentioned for P2...

Also, the IDL implementation is inconsistent: for 64bit types the

limit does not exist and
ishft(long64(1),64) = 0 as expected, for all other types there's the 0
to 31 limit. Then again, 64bit types aren't even mentioned in the
ishft documentation...

So, my guess: it's just crappy documentation.

Cheers, Ben

On 17 Mrz., 10:46, FÖLDY Lajos <fo...@rmki.kfki.hu> wrote:
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> lajos