Subject: IDL sorting
Posted by Wox on Wed, 17 Oct 2007 15:25:28 GMT
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Hi,

I'm have that IDL sorting problem again: original subscript order is
not maintained when values are equal. Is there a more elegant way then
resorting each subarray of equal values on there original subscript?

Thanks.

Subject: Re: IDL sorting
Posted by Conor on Tue, 06 Nov 2007 16:18:24 GMT
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On Nov 1, 7:02 pm, JD Smith <jdsm...@as.arizona.edu> wrote:
> On Thu, 18 Oct 2007 21:58:15 +0000, Karl Schultz wrote:
>> wlandsman <wlands...@gmail.com> wrote:
>>> On Oct 18, 2:30 pm, Karl Schultz <k...@io.frii.com> wrote:
>>>> Because it is not a *stable* sort. Stable sorting algorithms preserve
>>>> the order of equal keys.
>
>>>> > IDL just uses the sort algorithm of the underlying OS. As far as I
>>>> > am aware, the SORT function on Linux boxes *does* preserve the order
>>>> > of equal values, but that on Mac and Windows machines does not. I
>>>> > would be interested to hear if anyone finds any exceptions to this
>>>> > rule.
>
>>>> Are you using this SORT function from the command line? If so, you
>>>> are using a shell function or a sort program in your PATH. Someone
>>>> probably decided that a stable sort made more sense for people sorting
>>>> things from the command line or from shell scripts. Reasonable.
>
>>> I don't understand this paragraph. I am just using the IDL intrinisc
>>> SORT command. On every Linux box I have ever been on, it appears
>>> that the C lib sort algorithm used by IDL SORT() *is* stable, whereas
>>> it is *not* stable on Windows or MacOS.
>
>> When you said "SORT function on Linux boxes", I thought you meant from the
>> Linux command line. My bad.
>
>> So it looks like the qsort() implementation on the Linux distros you tried
>> happens to be stable. That's all.
>
> I side with Wayne: this platform difference has a real impact on many
> SORT-based algorithms. I understand the goal of re-using a tuned system

> QSORT, but going the extra step to get it to function the same on all
> IDL-supported systems would seem a no-brainer.
>
> JD

I think you have your answer: Just use a linux based operating system! Then, you'll probably be using a stable sort and you won't have to worry about this! I'm afraid I don't have any other thoughts : (

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