Subject: Re: Bizarre slowness from sort()
Posted by Paul Van Delst[1] on Tue, 23 Apr 2002 19:58:19 GMT

Jonathan Joseph wrote:

>
> I had the following enlightening discussion about qsort with a
> programmer from RSI who responded to my post, but I'm still not
> entirely convinced. Can anyone comment on this?

From Jon Bentley's "Programming Pearls", 2nd Ed, pg 119 (describing qsorts and their efficiency):

"The qsort1 [code snippet in his book] function quickly sorts an array of random integers, but how does it perform on nonrandom inputs? ..... consider an extreme case: an array of n identical elements. .... the total run time is $O(n^2)$. The run time for n=1000000 jumps from a second to two hours."

There is also discussion of a bunch of nifty things one can do to speed up sorting. The code snippets are only about 10-15 lines long so it would be not to difficult to translate from the C code into IDL (I think).

Probably worth it if you or your colleague will be sorting the offending type of input data.

paulv

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