
Subject: Re: A new container in works: Flex - fast insertion vector

Posted by [mirek](#) on Fri, 21 Sep 2007 13:06:53 GMT

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Quote:

Sorting would beat it for a static set. But would it, if the set was changing (adding/removing elements), and at any given time I might need the order? Add/remove is $O(\log n)$, iteration should be linear, and sorting would cause the iteration to become $O(n \log n)$ (sort+iterate), unless add/remove maintains sort order. And even in the best case of flex, add/remove would be $O(\sqrt{n})$, worse than $O(\log n)$, right?

That is correct,

- there is a bit more about O - something like "generic speed". Flex seems to be faster up to 160 elements (in fact, even sorted U++ Vector is faster there than `std::set`).

- I believe I do a lot of programming, yet I never had encountered a problem that would require continual sorted iteration.

(BTW, I have another idea of container, something much more traditional, basically sorted variant of Index based on tree implementation; with method `GetNextSorted` that returns the index of next element in sequence. Given my experience with Index v.s. node based hashmap, I dare to say that such linearized tree implementation will be faster than node based.)
