
Subject: Re: Merits of different ways of 'extending' arrays
Posted by [Michael Galloy](#) on Tue, 17 Sep 2013 21:47:17 GMT
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On 9/17/13 1:34 PM, Yngvar Larsen wrote:

> On Monday, 16 September 2013 15:47:38 UTC+1, suicida...@gmail.com
> wrote:

>

>> Allocating and expanding in fixed "blocks" as suggested before is a
>> way to elegantly handle this problem, however the block size needs
>> to be tuned for every application or you can start to get some big
>> slowdowns.

>

> In the generic case when "big enough" is not known, the best
> algorithm is to double the size of the array every time you hit the
> current capacity. (Or 3x or 1.5x, does not matter as long as the
> growth is exponential in as a function of the number of resizes.)

>

> See

>

> http://en.wikipedia.org/wiki/Dynamic_array

>

>

>

This is what MGcoArrayList does.

https://github.com/mgalloy/mglib/blob/master/src/collection/mgcoarraylist__define.pro

I used to add capacity in increments of a BLOCK_SIZE property set by the user, but I think the doubling is the way to go.

Mike

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Michael Galloy

www.michaelgalloy.com

Modern IDL: A Guide to IDL Programming (<http://modernidl.idldev.com>)

Research Mathematician

Tech-X Corporation
