Subject: Re: array concatenation and optimization
Posted by Paul van Delst on Wed, 26 Sep 2001 19:59:17 GMT
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Sean Raffuse wrote:
>
> Hello.
>
> I am trying to read a bunch of data from a file to a structure array. I'm
> not sure many data entries the file will have until I have read it and so I
> am increasing the size of the structure array after reading each line.

Count the number of lines first, then create your arrays the required size. (I'm assuming your file is ASCII data).

> This is working but it has increased the processing time of my loop by an
> order of magnitude. Is there a better way to do this? Is there a reason
> this is so slow?

A while back someone else in this newsgroup more knowledgable than me (I think Craig?) explained why this is a bad method when the number of points is very large. Suffice it to say for something like up to maybe a couple hundred points, concatenation is o.k. Any more and you'd be needlessly sucking up CPU cycles shifting/concatenating large blocks of data on the fly.

I changed some of my IDL code that reads a huge binary file from the concat method to estimating the number of points, added some slop and then read it all in a chunk (or in your case, a line) at a time, counting the points as I went. Before returning I simply truncate the array. Sped up my code by at least an order of magnitude.

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