Subject: Memory Mapped Files
Posted by crydev on Thu, 02 May 2013 07:38:06 GMT
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Hello,

I'm building a program where I need to write data from a list/vector to the memory with very high I/O performance, because it has to be very fast. In this case you have to be thinking of around ~1 GB of raw data.

I have been looking at memory mapped files. I think this is a very good solution for me. What I looked for first after I got it to know though, was looking for a solution embedded in U++. I couldn't find one. Is there a solution for using memory mapped files? Or do you guys/girls maybe have another solution then memory mapped files that I should have a look at?

Thanks in advance!
crydev

Subject: Re: Memory Mapped Files
Posted by BioBytes on Thu, 02 May 2013 18:30:09 GMT
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Hi Crydev,

Did you have a look to MemStream or MemReadStream object ?

http://www.ultimatepp.org/src$Core$Stream$en-us.html

Regards

Biobytes

Subject: Re: Memory Mapped Files
Posted by dolik.rce on Thu, 02 May 2013 18:48:50 GMT
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Hi crydev,

crydev wrote on Thu, 02 May 2013 09:38write data from a list/vector to the memory
Is that really what you wanted to write? If yes, then copying data from Vector to other location in memory can be as simple as calling memcpy(dest, vector.Begin(), count*itemsize).

If you actually meant copying from/to file on disk, then Streams are probably the easiest way to go. AFAIK there is currently nothing using memory mapped files in U++. But to use it for storing, it should be just a simple call to mmap (on Linux) followed by memcpy.

Best regards,
Honza

Subject: Re: Memory Mapped Files
Posted by mirek on Sat, 11 May 2013 08:02:46 GMT
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U++ actually has file mapping encapsulated to hide platform differencies, see FileMapping.