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Subject: How to read file into Memory

Posted by [spidertp](#) on Thu, 11 Oct 2007 12:05:53 GMT

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Hello everybody,

I need to work with big files (> 100MB) and I like to load part of them to memory in a thread, process data in main app and read next part if needed.

I have 2 tables.

At first I load both of them with 10MB of binary data (so it gives me 20MB in memory). First I process data from table1 and when index goes to table2, I'm starting a thread to load new data to table1 and so on. Basically, in main app I want to process data without interrupts due to harddisk access.

The problem is that I have a lot of exceptions because of defining tables with new operator and deleting them.

I'm reading contents of file with code:

```
object * table1 = new object[10*1024*1024]; // 10MB
FileIn in(filename);
in.Get(table1, sizeof(table1));
```

After processing I make:

```
delete table1;
```

And... here I have a lot of problems with heap.

Can I load a file to memory in a different method than new/delete to some UPP container?

Please help.

Best regards

Tomek

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Subject: Re: How to read file into Memory

Posted by [mirek](#) on Thu, 11 Oct 2007 22:02:00 GMT

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spidertp wrote on Thu, 11 October 2007 08:05Hello everybody,  
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And... here I have a lot of problems with heap.

Well, using new / delete is not wise, anyway it should work, what problems exactly do you have?

Quote:

Can I load a file to memory in a different method than new/delete to some UPP container?

Well, I would use Buffer:

```
Buffer<object> table1(10*1024*1024);
```

BTW, are you aware that the allocation will most likely be `sizeof(object) * 10MB` (not only 10MB, if `sizeof(object) > 1`)?

Mirek

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Subject: Re: How to read file into Memory  
Posted by [spidertp](#) on Fri, 12 Oct 2007 06:08:06 GMT  
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Thank you Mirek for your answer.

Quote:Well, I would use Buffer:

```
Buffer<object> table1(10*1024*1024);
```

I read Container Tutorial but not "Overview of U++ containers - NTL" and I was not aware of

Buffer container.

Quote:BTW, are you aware that the allocation will most likely be `sizeof(object) * 10MB` (not only 10MB, if `sizeof(object) > 1`)?

Well, I'm dividing 10MB by `sizeof(object)` and then creating table with number of objects which can fit inside.

Quote:Well, using `new / delete` is not wise, anyway it should work, what problems exactly do you have?

I think I had problems with `delete` operator because I used `delete` and not `delete[]` operator. I had exceptions in `FreeDebug` function.

Thank you or your help and keep doing good work on UPP!

Best regards

Tomasz

Ah, I have one more question about debugging - how can I see specific object in a table or vector?

For example:

```
struct MyStruct
{
float table[100];
String text;
}

main
{
...
MyStruct myTable[100];
Vector<MyStruct> myVector[100];

myVector[99].table[1] = 15.5;
...
}
```

In debugging mode, in Explorer I write:  
`myVector[99]`

and he says

Quote:

Invalid operand.

Only writing `myVector` is OK, but how can I see specific item in it? Only LOG or DUMP?

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Subject: Re: How to read file into Memory  
Posted by [mirek](#) on Fri, 12 Oct 2007 07:00:40 GMT  
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Unfortunately, overloaded operators are not supported in debugger.

Mirek

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Subject: Re: How to read file into Memory  
Posted by [spidertp](#) on Fri, 12 Oct 2007 07:20:02 GMT  
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Quote:Unfortunately, overloaded operators are not supported in debugger.

Well, it'd be nice ot have it in the future.

Thank you Mirek for your help  
Tomek

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