

Re: memory allocation problems

Source: <http://www.tech-archive.net/Archive/VC/microsoft.public.vc.language/2005-06/msg00025.html>

- *From:* "Alexander Grigoriev" <alegr@xxxxxxxxxxxxx>
 - *Date:* Tue, 31 May 2005 22:40:03 -0700
-

I can't help but wonder what was wrong with simply:

```
fprintf(fp, "%s%s\n\n", curtime, msg);
```

No funky allocations, no nothing...

"Steve Long" <Steve_Noneya@xxxxxxxxxxxxx> wrote in message news:OkbtP6iZFHA.612@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx

> Victor,
> Thanks for your reply. Here's the entire body of the function. I don't
> seem
> to be able to get (nothrow) to work. I've include <new>:

```
>  
> void WriteMessage(FILE* fp, const char* msg)  
> {  
> time_t curr = time(0);  
> char* curtime = ctime((const time_t*) &curr);  
> char* buffer = new char[(strlen(curtime) + strlen(msg) + 3)];  
> strcpy(buffer, curtime);  
> strcat(buffer, msg);  
> strcat(buffer, "\n\n");  
> if (fp != NULL)  
> fwrite(buffer, 1, strlen(buffer), fp);  
> free(curtime);  
> delete[] buffer;  
> return;  
> }
```

>
>
> "Victor Bazarov" <v.Abazarov@xxxxxxxxxxxxx> wrote in message
> news:%23%23%23TfRiZFHA.580@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx

>> Steve Long wrote:
>>> this is probably most fundamental but I don't code in C++ often and I'm
>> just
>>> not getting why the code is crashing with a:
>>> Unhandled exception at 0x77f75a58 in FileIOtest.exe: User breakpoint
>>>
>>> I have a function that calls this line of code:
>>>

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```
>>> char* buffer = new char[sizeof(char) * (strlen(curtime) + strlen(msg) +
> 3)];
>>
>> OK, sizeof(char) is always 1, you can easily drop it. Now, what is
>> 'curtime'? Is it something that can be passed to 'strlen'? What is
>> 'msg'? Same question, can it be passed to 'strlen'? Remember that
>> 'strlen' is very fragile, it has undefined behaviour if you pass NULL
>> to it...
>>
>>> The first time I call the function, all is well but subsequent times it
>>> crashes with the above exception. All I'm doing is a strcpy, strcat and
>>> writing to a file in the function and then I delete buffer memory using
>>> delete.
>>>
>>> What could the problem be. Sorry is this is just really stupid...
>>
>> Could be that you're just running out of memory... Try
>>
>> char* buffer = new (nothrow) char[strlen(curtime)
>> + strlen(msg) + 3];
>>
>> and see if NULL is returned.
>>
>> V
>
>
```

- **Follow-Ups:**

- ◆ [Re: memory allocation problems](#)

- ◇ From: Steve Long

- **References:**

- ◆ [Re: memory allocation problems](#)

- ◇ From: Steve Long

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