

# 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](mailto: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](mailto:Steve_Noneya@xxxxxxxxxxxxx)> wrote in message [news:OkbtP6iZFHA.612@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto: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](mailto:v.Abazarov@xxxxxxxxxxxxx)> wrote in message  
> [news:%23%23%23TfRiZFHA.580@xxxxxxxxxxxxxxxxxxxxxxxxxxxxx](mailto: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:  
>>>

## Re: memory allocation problems

```
>> > 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...
```