
Subject: Re: Heap errors behavior is dependent on target machine.

Posted by [jfranks](#) on Sat, 28 Nov 2015 21:37:23 GMT

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Thank you for helping us.

Q1. Does the problem occur with e.g. examples/UWords too?

A1. No, the problem does NOT occur with examples/UWord. I compiled and ran this on machine 'B' and everything worked correctly. I was able to enter some text, save it to a qtf file, exit the program without any issues.

Q2. Have you tried memory breakpoint?

[http://www.ultimatepp.org/srcdoc\\$Core\\$Leaks\\$en-us.html](http://www.ultimatepp.org/srcdoc$Core$Leaks$en-us.html)

A2. Yes we have done that. Memory breakpoint #1 was used to generate the snapshot of the call-stack (uploaded previously), while in the debugger.

It seems strange memory break-point #1 was not hit immediately when the application was run. Instead, break-point #1 did not engage in the debugger until we tried to exit the application. I expected it to be the other way around.

Q3. Can you post a couple of lines of log with leak with smallest breakpoint number?

A3. Yes, I have done that on this response. Also, I was in error when I said that there were more than 2200 items in the log file. Actually, there are only 355 items each time we run the application and then exit. I ran wc on the log-file erroneously thinking that each line was a memory leak (too many long hours).

```
174 items + <size 828>
174 items + <size 812>
7 items   <various sizes>
```

I've included the log-file with comments that show where patterns repeat until the final 7 items are reported. I have not been able to figure out anything relating to the repeating patterns, however, the last 7 items have to do with a shared library that manages the serial ports. Each one of the 7 items is caused by a stdc++ string that is part of that library.

As an experiment, I modified that shared library to use const char* instead of stdc++ strings. For example:

```
#if 0
const std::string ERR_MSG_PORT_NOT_OPEN    = "Serial port not open." ;
const std::string ERR_MSG_PORT_ALREADY_OPEN = "Serial port already open." ;
const std::string ERR_MSG_UNSUPPORTED_BAUD = "Unsupported baud rate." ;
const std::string ERR_MSG_UNKNOWN_BAUD    = "Unknown baud rate." ;
const std::string ERR_MSG_INVALID_PARITY   = "Invalid parity setting." ;
const std::string ERR_MSG_INVALID_STOP_BITS = "Invalid number of stop bits." ;
const std::string ERR_MSG_INVALID_FLOW_CONTROL = "Invalid flow control." ;
#else
const char* ERR_MSG_PORT_NOT_OPEN    = "Serial port not open." ;
const char* ERR_MSG_PORT_ALREADY_OPEN = "Serial port already open." ;
const char* ERR_MSG_UNSUPPORTED_BAUD = "Unsupported baud rate." ;
const char* ERR_MSG_UNKNOWN_BAUD    = "Unknown baud rate." ;
const char* ERR_MSG_INVALID_PARITY   = "Invalid parity setting." ;
const char* ERR_MSG_INVALID_STOP_BITS = "Invalid number of stop bits." ;
const char* ERR_MSG_INVALID_FLOW_CONTROL = "Invalid flow control." ;
#endif
```

I compiled and installed the modified serial port shared library and then re-tested the application. Those last 7 items disappeared! Also, the other items in the log file that repeated 174 times now repeat only 124 times. I don't know why that changed.

There must be a clue here.

-- Jeff

File Attachments

1) [p101-dbg-log.txt](#), downloaded 410 times
