## Subject: Problems with UPP_HEAP in multi-threaded
Posted by cocob on Tue, 10 Jun 2008 19:49:16 GMT

Hello all

One more time, sorry for my english low skill, ...

I have some problems with UPP Core package in multi-threaded.

I have a package which use STL (strings, vectors, ...) Its functions works perfectly in an app with a single thread but in multithreaded i get a crash "Invalid memory access". It seems to come from overloaded function for HEAP (new, delete) which are use in STL for example in std::string::append().

Here a little example producing my problems.

My config : Debian lenny x86 UPP SVN r284


```
#include <Core/Core.h>
#include <iostream>

using namespace Upp;

class test
{
public:
 typedef test CLASSNAME;
 void loop();
 void start();
};

void test::start()
{
 Thread().Start(THISBACK(loop));
}

void test::loop()
{
 std::string str;
 while(true)
 {
  Thread().Sleep(200);
  str.append("test");
  std::cout << "loop" << std::endl;
 }
}
```

```
CONSOLE_APP_MAIN
{
 (new test)->start();

 while(true)
 {
  Thread().Sleep(500);
  std::cout << "Wait..." << std::endl;
 }
}
```

---

## Subject: Re: Problems with UPP_HEAP in multi-threaded
Posted by cocob on Tue, 10 Jun 2008 20:08:24 GMT
View Forum Message <> Reply to Message

finally the problem seems to have no link with multi-threading

this piece of code crash without flagMT defined

#include <Core/Core.h>

```
CONSOLE_APP_MAIN
{
 std::string str;
 str.append("test");
}
```

---

## Subject: Re: Problems with UPP_HEAP in multi-threaded
Posted by mirek on Tue, 10 Jun 2008 21:44:20 GMT
View Forum Message <> Reply to Message

It works for me in ubuntu 8.04 with gcc 4.1.

What is you gcc --version ?

Is the problem in optimal mode only or in debug too?

Mirek

---

Subject: Re: Problems with UPP_HEAP in multi-threaded
Posted by cocob on Wed, 11 Jun 2008 06:49:03 GMT

gcc -version show 4.2 but 4.1 and 4.3 are also installed.
Does theide use the 4.1 version ?

This problem occurs with Force_speed and not with debug (i never tested optimal).

Thanks for your help

cocob

---

Subject: Re: Problems with UPP_HEAP in multi-threaded
Posted by mirek on Wed, 11 Jun 2008 07:12:44 GMT

4.2 is flawed.

See this:

  http://www.ultimatepp.org/forum/index.php?t=msg&th=3466& amp; amp;start=0&

Now of course the problem is what GCC is theide using. I am not quite sure how you got your U++; AFAIK regular svn .deb for Ubunut with theide binary has 4.1 as dependency and uses it to compile (presets the build method).

Have you installed with binary or compiled theide from sources?

Mirek

---

Subject: Re: Problems with UPP_HEAP in multi-threaded
Posted by cocob on Wed, 11 Jun 2008 07:54:00 GMT

I have installed .deb downloaded here

http://www.ultimatepp.org/svnbuilds/

---

Subject: Re: Problems with UPP_HEAP in multi-threaded
Posted by mirek on Wed, 11 Jun 2008 08:45:56 GMT

Now THAT is little bit more weird

Could you try that testcase posted in other thread (the one about the bug)?

What is the Compiler name in your Setup/Build methods...?

Mirek

---

Subject: Re: Problems with UPP_HEAP in multi-threaded
Posted by cocob on Wed, 11 Jun 2008 10:54:07 GMT
View Forum Message <> Reply to Message

In build method my compiler name is g++-4.1

I have tried the test of the other thread. It seems to works (no invalid memory access and it prints "32") in both debug speed and optimal.

The same test prints 0 with g++-4.2 and "32" with g++-4.3

I don't think this is a compiler problem.
I have some problems when i use Core package only

Thanks for help

cocob

---

Subject: Re: Problems with UPP_HEAP in multi-threaded
Posted by cocob on Wed, 11 Jun 2008 11:19:24 GMT
View Forum Message <> Reply to Message

My problem is solved with g++-4.3 instead of g++-4.1 !

---

Subject: Re: Problems with UPP_HEAP in multi-threaded
Posted by captainc on Thu, 07 Aug 2008 00:51:45 GMT
View Forum Message <> Reply to Message

I'm running into the same problem. Having trouble with g++-4.1 and g++-4.2. Attempting to compile and install 4.3 now. What is the issue with it?

---

Subject: Re: Problems with UPP_HEAP in multi-threaded
Posted by cocob on Thu, 07 Aug 2008 06:42:57 GMT
View Forum Message <> Reply to Message

since this problem i always compile with g++-4.3 and i got no more problems

Subject: Re: Problems with UPP_HEAP in multi-threaded
Posted by captainc on Fri, 08 Aug 2008 02:30:08 GMT
View Forum Message <> Reply to Message

I'm using g++ 4.3.1 and I am still getting the problem. I am using CallbackArgTarget example to test. I did a clean Upp out directory and full recompile using g++-4.3 and still getting Fatal error invalid memory access. Though the main gui window comes up; it just has the error message on it. Non-gui apps seem to work though...

Subject: Re: Problems with UPP_HEAP in multi-threaded
Posted by mirek on Fri, 08 Aug 2008 06:31:29 GMT
View Forum Message <> Reply to Message

Confirmed.

Subject: Re: Problems with UPP_HEAP in multi-threaded
Posted by mirek on Fri, 08 Aug 2008 06:41:15 GMT
View Forum Message <> Reply to Message

Anyway, only a minor bug:

```
void Ctrl::PopUp(Ctrl *owner, bool savebits, bool activate, bool, bool)
{
 LLOG("POPUP: " << UPP::Name(this));
 Ctrl *q = owner ? owner->GetTopCtrl() : GetActiveCtrl();
 ignoretakefocus = true;
 Create(q, true, savebits);
 if(activate && q) {
  q->StartPopupGrab();
  popupgrab = true;
 }
 if(top) popup = true;
 WndShow(visible);
 if(activate && IsEnabled())
  SetFocus();
 if(top) top->owner = owner;
 StateH(OPEN);
}
```

-> the problem was than the menu is "alone" without real application. Fixed by "&& q".

Mirek