Subject: Crash on Cout with MSC15
Posted by NilaT on Wed, 20 Jul 2016 14:12:27 GMT
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Hello,

// edit:
For those who don't want to read all the text below:
What changes have to be done to 2014 sources that MT flag will work with MSC15 like newest (2015) sources do???
Thanks

I formated my Laptop recently and decided to install the newest version of Upp and MS VS afterwards.
So I installed Upp 2015.2 (Version 9251) and MS Visual Studio Community 2015 (which is free to download).
I work on a Windows 10 Pro N Laptop.

So, after a few tweaks here and there, everything seems to work fine (despite the Win XP incompatibility, but thats okay)
BUT, I discovered one error which drives me nuts...

Cout() doesn't seem to work properly... printf is no problem though.
Sure I could change all Cout() calls to printf but that's not a solution.

The funny thing is, in debug everything works fine, only in optimal the program crashes immediately.
I tried to debug the optimal version in Visual Studio, the error seems to be in:

```
void Stream::Put(const char *s)
{
 while (*s) Put(*s++);
}
```

The error is always the same: (The error is german and I tried to translate it to english as good as I can)
Exception at 0x00AB60C7 (address changes every time) in (Projectname).exe: 0xC0000005: Access violation at read at position 0x0000004.

But the funniest thing is, that this must be something depending on my includes (it's a rather big project)
Because, I made a new test application, only containing the following code:

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

using namespace Upp;

CONSOLE_APP_MAIN
```

```
{
 Cout() << "\n---------------------------------\n";
 ReadStdIn();
}
```
and this just works fine, using the SAME sources as the big project.
The \n----... is also the first line in my other project.

Any suggestions?
Any help is very appreciated!

I also tried differend compiler flags (GS) and sources (2014, 2015), always the same result...
Everything works, except my "old" project.

//edit: I narrowed it down to the MT flag... Please just create a new multithreaded console project with the content I posted above and try it... It will crash. But why?

//edit2: Okay, only 2014 sources are affected. The newest sources work fine with MT... I'm on it.
Please keep this thread if other people have the same issue

Subject: Re: Crash on Cout with MSC15
Posted by deep on Wed, 20 Jul 2016 14:34:59 GMT
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Hi,

In new release "optimal" mode is deprecated.
Quote:The funny thing is, in debug everything works fine, only in optimal the program crashes immediately.
I tried to debug the optimal version in Visual Studio, the error seems to be in:

Check flags for "release" mode.

Or check with "Optimized speed" mode. I faced similar issues with optimal mode.

Subject: Re: Crash on Cout with MSC15
Posted by NilaT on Wed, 20 Jul 2016 14:43:39 GMT
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Thanks for the quick answer,

as I discovered, it has something to do with MT flag and the changes from 2014 sources to 2015.
Because the crash only appears in MT with 2014 sources.
MT on 2015 work fine...

I think there must be a significant difference... But where?!

Must be something about that encoding and converting stuff, right?

-

Which flags do you mean exactly, because there are sooo many different flag and option menus in Upp.
But if you mean the Setup > Build options, I got:
Common options: /bigobj /D_ATL_XP_TARGETING /FS
Debug options: -Od
Debug link options: /STACK:20000000
Optimize for speed: -O2
Optimize for size: -O1
Release link options: same as Debug link options

Subject: Re: Crash on Cout with MSC15
Posted by deep on Thu, 21 Jul 2016 05:24:20 GMT
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Hi,

Please check when this gets called first time

void Stream::Put(const char *s)

pointer points to valid "cstring"

Subject: Re: Crash on Cout with MSC15
Posted by NilaT on Thu, 21 Jul 2016 06:25:28 GMT
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Could somebody please confirm the following?
New Console App in latest upp with latest sources, MSC15 on Win 10.
Compile and run in optimal with MT flag!
Code:

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

using namespace Upp;

CONSOLE_APP_MAIN
{
 CoutUTF8(); // Without this line, works perfect. With this line = crash (same error as with 2014 upp sources)
 Cout() << "\n---------------------------------\n";
 ReadStdIn();
}
```

And explain me where and why?
Thanks.

//edit: Because we work with 2014 sources in our project, please forget that 2015 example.
I tried to apply the changes in CoutStream from 2015 to 2014 sources, because I thought a wrong Charset causes the error.
Afterwards I edited the Stream::Put method:

```
void Stream::Put(const char *s)
{
 while (*s)
 {
  Put(*s);
  *s++;
 }
}
```

In debug, Put calls void Put(int c) in Stream.h:

```
void      Put(int c)
{
  if(ptr < wrlim)
    *ptr++ = c;
  else
    _Put(c);
}
```

and then calls _Put, which, in endeffect calls the "new" Put0 which converts the charset.

BUT, in optimal, the error raises in Stream::Put -> Put call.
I debug in Visual Studio, put a Breakpoint on the Put(*s); call and press F11, but I can't jump into the function...

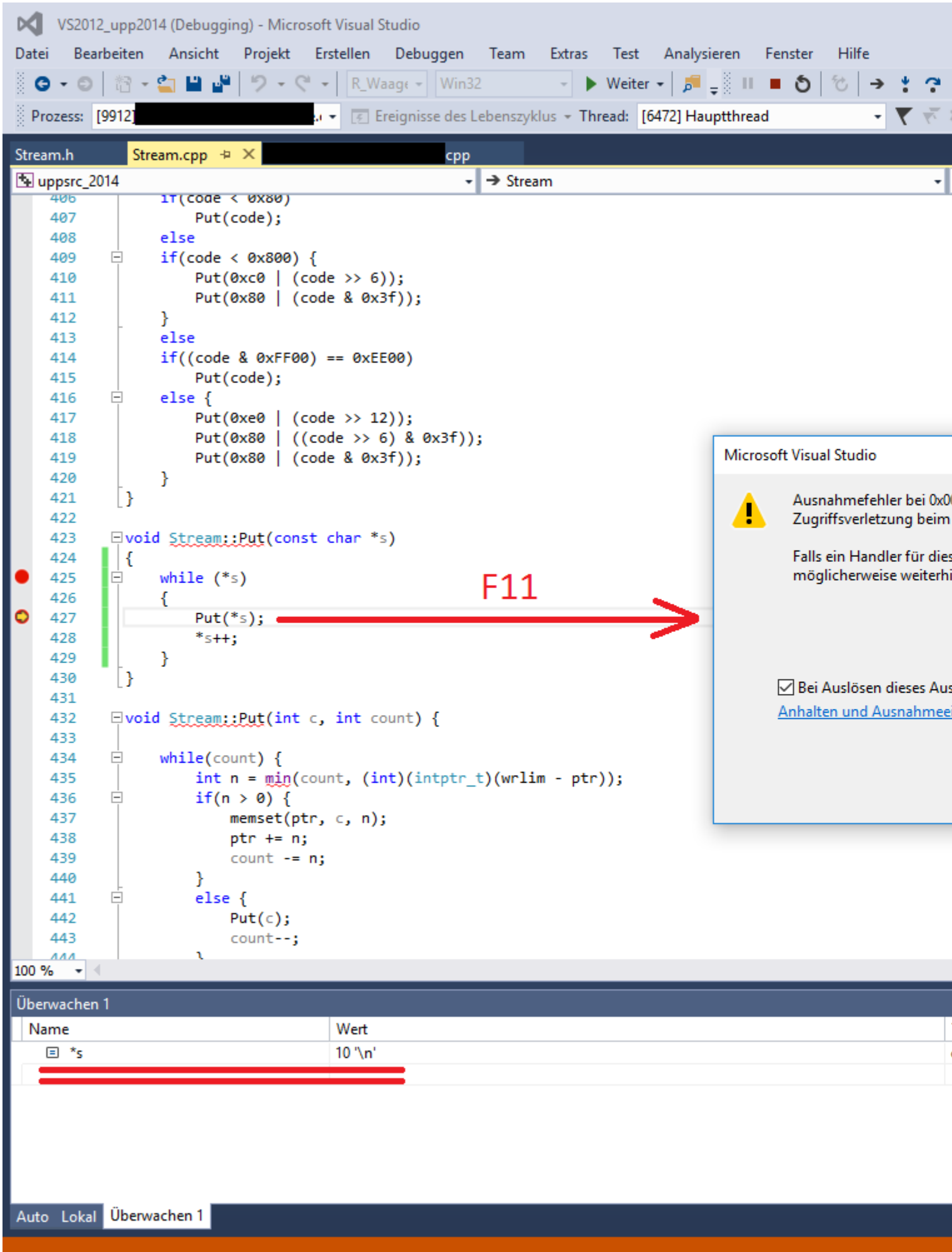
What the heck...

// edit:
I tried to compile our project with 2015 sources, same result.
Debug runs fine, optimal crashes.

I attach a pick of our project, compiled with 2014 sources and MSC15 in optimal.

File Attachments

1) crash.png, downloaded 692 times


VS2012_upp2014 (Debugging) - Microsoft Visual Studio
Datei Bearbeiten Ansicht Projekt Erstellen Debuggen Team Extras Test Analysieren Fenster Hilfe
Weiter
Prozess:
Ereignisse des Lebenszyklus
Thread: [6472] Hauptthread
Stream.h
Stream.cpp
cpp
uppsrc_2014
Stream
406 if(code < 0x80)
407 Put(code);
408 else
409 if(code < 0x800) {
410 Put(0xc0 | (code >> 6));
411 Put(0x80 | (code & 0x3f));
412 }
413 else
414 if((code & 0xFF00) == 0xEE00)
415 Put(code);
416 else {
417 Put(0xe0 | (code >> 12));
418 Put(0x80 | ((code >> 6) & 0x3f));
419 Put(0x80 | (code & 0x3f));
420 }
421 }
422
423 void Stream::Put(const char *s)
424 {
425 while (*s)
426 {
427 Put(*s);
428 *s++;
429 }
430 }
431
432 void Stream::Put(int c, int count) {
433
434 while(count) {
435 int n = min(count, (int)(intptr_t)(wrlim - ptr));
436 if(n > 0) {
437 memset(ptr, c, n);
438 ptr += n;
439 count -= n;
440 }
441 else {
442 Put(c);
443 count--;
F11
Microsoft Visual Studio
Ausnahmefehler bei 0x0
Zugriffsverletzung beim
Falls ein Handler für dies
möglicherweise weiterhi
Bei Auslösen dieses Aus
Anhalten und Ausnahmee
100 %
Überwachen 1
Name
Wert
*s
10 '\n'
Auto Lokal Überwachen 1