Subject: serious mingw bug?
Posted by hojtsy on Sun, 01 Jun 2008 15:48:27 GMT
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I am using U++ 2008.1beta2 with the embedded MinGW 4.3.0 on WinXp sp2.
I think I have found a code generation bug in MinGW for this code:

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

struct Test
{
 Test() { Upp::Cout() << "Test::Test()\n"; }
 ~Test() { Upp::Cout() << "Test::~Test()\n"; }
};

struct Worker
{
 Worker * Fn1()
 {
  bool throwException = false;
  bool enterLoop = true;
  for(Test t; enterLoop;)
  {
   if(throwException) throw int(3);
   Upp::Cout() << "returning this = " << (void *) this << "\n";
   return this;
  }
 }

 int i;
};

CONSOLE_APP_MAIN
{
 Worker w;
 Upp::Cout() << "&w = " << (const void *) &w << "\n";
 Worker *w2 = w.Fn1();
 Upp::Cout() << "received = " << (const void *) w2 << "\n";
}
```

output is below. Notice that Fn1 incorrectly returns the null pointer. Both the non-invoked throw and the loop is important: if I remove any of them, the bug doesn't occur. Am I missing something? Wouldn't is be good idea to revert the included MinGW to a stable version?

```
&w = 0x12FF40
Test::Test()
returning this = 0x12FF40
Test::~Test()
received = 0x0
```

- hojtsy

Subject: Re: serious mingw bug?
Posted by mirek on Sun, 01 Jun 2008 20:13:50 GMT
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Have you filed it in GCC's bugzilla? (remove U++ dependency before doing so

Have you tested in Linux?

Mirek

Subject: Re: serious mingw bug?
Posted by hojtsy on Mon, 02 Jun 2008 19:26:47 GMT
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I downloaded latest mingw, c++ version reported is
"c++ (GCC) 4.3.0 20080305 (alpha-testing) mingw-20080502"

Whereas c++ version reported from mingw inside U++ is
"c++ (GCC TDM-2 for MinGW) 4.3.0"

The "4.3.0 20080305" version I have downloaded does not reproduce the bug, only the one in U++. It is not clear which version is newer, I suppose the "4.3.0 20080305" version is newer. Is it? Did you take c++ 4.3.0 from the mingw page earier?
It may be that this bug has been corrected in the meantime so that is why "4.3.0 20080305" does not reproduce it.

This bug breaks inline functions which have a throw inside INTERLOCKED_. That is how I noticed it.

I don't have a Linux box where I can test it, sorry.

-hojtsy

Subject: Re: serious mingw bug?
Posted by mirek on Mon, 02 Jun 2008 20:26:41 GMT
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I guess this means we should update mingw from official mingw, correct?

Mirek

Subject: Re: serious mingw bug?
Posted by hojtsy on Thu, 05 Jun 2008 21:12:24 GMT
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luzr wrote on Mon, 02 June 2008 16:26I guess this means we should update mingw from official mingw, correct?
Yes, if you have an older mingw version in U++. I don't know that from the version strings. How and when did you acquire the mingw that is part of latest U++ package?

- hojtsy