Subject: [GCC][C++11] error: call of overloaded 'pick(Upp::Any&)' is ambiguous
Posted by Zbych on Sat, 15 Aug 2015 20:35:36 GMT

Hi,

When I am trying to turn on c++11 and compile even simplest application:

#include <Core/Core.h>

using namespace Upp;

CONSOLE_APP_MAIN
{
}

gcc (4.8.4/ubuntu1~14.04) shows me this errors

/home/zbych/upp/uppsrc/Core/Other.h:98:70: error: call of overloaded 'pick(Upp::Any&)' is ambiguous
  void operator=(Any rval_ s)   { Clear(); Pick(pick(s)); }
/home/zbych/upp/uppsrc/Core/Defs.h:391:5: note: T&& Upp::pick(T&) [with T = Upp::Any]
 T&& pick(T& x) { return static_cast<T&&>(x); }
/home/zbych/upp/uppsrc/Core/Defs.h:394:5: note: T&& Upp::pick(T&&) [with T = Upp::Any&]
 T&& pick(T&& x) { return static_cast<T&&>(x); }

It appears that gcc doesn't know which template it should use:

template <typename T>
T&& pick(T& x) { return static_cast<T&&>(x); }

template <typename T>
T&& pick(T&& x) { return static_cast<T&&>(x); }

How can I fix this errors?

Subject: Re: [GCC][C++11] error: call of overloaded 'pick(Upp::Any&)' is ambiguous
Posted by Klugier on Sat, 15 Aug 2015 21:22:53 GMT

Hello Zbych,

For me it works fine I enable c++11 by common option in build methods. My build method settings

look like this (part):

COMMON_OPTIONS = "-std=c++11";

This is my example, which test that c++11 is really enable:

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

using namespace Upp;

CONSOLE_APP_MAIN
{
     // Simply C++11 for each loop - in C++03 compilation error
 int tab[3] = {1, 2, 3};
 for(int& i : tab)
  Cout() << i << "\n";
}
```

P.S.
I have the same GCC version.

Sincerely,
Klugier

Subject: Re: [GCC][C++11] error: call of overloaded 'pick(Upp::Any&)' is ambiguous
Posted by Zbych on Sun, 16 Aug 2015 10:16:41 GMT

I removed ~/.upp and ~/Upp directories and downloaded the newest version from svn (8813), but the problem persists.
It doesn't matter if I add "-std=c++11" via package organizer or setup/build methods.

I made the same test on another computer. After upgrade to svn 8813, gcc started showing the same errors.

If I remove these lines (from Defs.h):

```
template <typename T>
T&& pick(T&& x) { return static_cast<T&&>(x); }
```

gcc stops complaining.

Subject: Re: [GCC][C++11] error: call of overloaded 'pick(Upp::Any&)' is ambiguous
Posted by Klugier on Sun, 16 Aug 2015 20:13:33 GMT

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Hello Zbych,

Yes, you are right. I used old uppsrc for compiling above example. I added this bug to redmine: http://www.ultimatepp.org/redmine/issues/1234.

And of course, I would like to sorry you for the mess I have made ;)

Sincerely,
Klugier

Subject: Re: [GCC][C++11] error: call of overloaded 'pick(Upp::Any&)' is ambiguous
Posted by Zbych on Mon, 17 Aug 2015 05:55:44 GMT

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There is absolutely no need to be sorry.
I really appreciate your help and confirmation that I am not the only one who sees this error :)

Subject: Re: [GCC][C++11] error: call of overloaded 'pick(Upp::Any&)' is ambiguous
Posted by mirek on Wed, 19 Aug 2015 18:56:19 GMT

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It looks like incompatibility between CLANG and GCC. Nightly autotests run c++11 tests in clang... so this escaped my attention.

Anyway, should be now fixed. Please check.