
Subject: `#ifdef PLATFORM_POSIX`
`#include <bits/atomicity.h>` for POSIX ?
Posted by [masu](#) on Tue, 17 Jul 2007 17:37:02 GMT
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Hi,

is the include (lines 340 to 342) in Core.h really needed?

```
#ifdef PLATFORM_POSIX
#include <bits/atomicity.h>
#endif
```

The include on my system is not needed, at least the compiler does not complain.

Background for this question is a compile error when using GCC 4.2 where atomicity.h is located in ext dir and I wonder if I can simply uncomment it.

I need this information for FreeBSD 7 systems, since GCC 4.2 is the default compiler there.

Matthias

Subject: Re: `#ifdef PLATFORM_POSIX`
Posted by [mirek](#) on Tue, 17 Jul 2007 21:05:21 GMT
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It is important in MT. It introduces atomic increments / decrements.

Try to compile something MT to find out

Mirek

Subject: Re: `#ifdef PLATFORM_POSIX`
Posted by [masu](#) on Wed, 18 Jul 2007 08:29:18 GMT
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Thanks, I guessed that, but I have also tried with a MT app and it works.

I double-check again today.

Can somebody try it on another POSIX platform?

Matthias

Subject: Re: `#ifdef PLATFORM_POSIX`
Posted by [mirek](#) on Wed, 18 Jul 2007 11:53:50 GMT

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It is not unlikely that it is indirectly included by some other header (GCC version of std::string e.g.).

Subject: Re: #ifdef PLATFORM_POSIX
Posted by [masu](#) on Wed, 18 Jul 2007 21:07:58 GMT
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```
Ok, what about replacing mentioned section with
#ifdef PLATFORM_POSIX
#ifdef COMPILER_GCC
#if __GNUC__ > 3
#include <ext/atomicity.h>
#else
#include <bits/atomicity.h>
#endif
#else
#include <bits/atomicity.h>
#endif
#endif
```

maybe it is needed to also include minor version number with `__GNUC_MINOR__` in the check (I only checked with gcc 4.2).

Matthias

Subject: Re: #ifdef PLATFORM_POSIX
Posted by [mirek](#) on Fri, 20 Jul 2007 08:22:45 GMT
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Why not, but I am sure I have built the current code with GCC4.1....

Subject: Re: #ifdef PLATFORM_POSIX
Posted by [fudadmin](#) on Fri, 20 Jul 2007 08:56:03 GMT
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then I can confirm that I'm using gcc 4.2.0 (ArchLinux) and it requires `<ext/atomicity.h>`
But I can't remember if that changed with 4.2 or 4.1.xx

Subject: Re: #ifdef PLATFORM_POSIX
Posted by [masu](#) on Fri, 20 Jul 2007 09:21:11 GMT

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luzr wrote on Fri, 20 July 2007 10:22Why not, but I am sure I have built the current code with GCC4.1....

Then I suggest to also use `__GNUC_MINOR__`:

```
#ifdef PLATFORM_POSIX
#ifdef COMPILER_GCC
#if ((__GNUC__ > 3) && (__GNUC_MINOR__ > 1))
#include <ext/atomicity.h>
#else
#include <bits/atomicity.h>
#endif
#else
#include <bits/atomicity.h>
#endif
#endif
```

Subject: Re: #ifdef PLATFORM_POSIX
Posted by [mirek](#) on Wed, 01 Aug 2007 14:26:21 GMT
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OK, why not...

Subject: Re: #ifdef PLATFORM_POSIX
Posted by [mirek](#) on Wed, 01 Aug 2007 16:03:04 GMT
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Well, I have checked removal variant and it works for me. Most likely, the required stuff is included with STL.

So I have just removed the #include for now.

(Sorry for taking so long...).

Mirek
