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Subject: Socket and multiple Threads

Posted by [whiteman](#) on Wed, 02 Dec 2009 14:49:29 GMT

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Is possible to use the same socket in more than one thread? I have a program that open more connection and wants to redirect all output to the same socket, this can create some problem with Upp Socket?

Thanks!

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Subject: Re: Socket and multiple Threads

Posted by [Didier](#) on Thu, 03 Dec 2009 23:24:45 GMT

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No problem,

just as long as you know what you are doing with them and that you have a protection mutex for each socket (the best way) or for all the sockets

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Subject: Re: Socket and multiple Threads

Posted by [Sc0rch](#) on Sun, 11 Jul 2010 21:50:53 GMT

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Hello, everyone!

Is there any example for this topic? In my program, when I try to use the Socket in threads, Socket is always closed. One variable: in main thread it's open, in other threads - closed. Why so?

Thank you,  
Anton.

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Subject: Re: Socket and multiple Threads

Posted by [mirek](#) on Sun, 11 Jul 2010 22:48:35 GMT

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Sc0rch wrote on Sun, 11 July 2010 17:50Hello, everyone!

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Anton.

Hey, it is still the same story (as with SQL).

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As soon as you have multiple threads and shared object, you HAVE TO "serialize" the access to the object using the mutex, so that only single thread "runs" the object at any given time. I mean, only single thread at any given time can read/write/execute members of object. This is what mutexes are for.

Rules are more fine-grained, but in practice this pretty much sums it.

Note: There ARE some objects where this does not hold, where you can call methods without mutex locking. Most of them are associated with multithreading, e.g. Mutex class itself...

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Subject: Re: Socket and multiple Threads  
Posted by [Sc0rch](#) on Mon, 12 Jul 2010 06:03:13 GMT  
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Subject: Re: Socket and multiple Threads  
Posted by [mirek](#) on Mon, 12 Jul 2010 07:01:43 GMT  
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Sc0rch wrote on Mon, 12 July 2010 02:03luzr wrote on Mon, 12 July 2010 05:48Sc0rch wrote on Sun, 11 July 2010 17:50Hello, everyone!

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Rules are more fine-grained, but in practice this pretty much sums it.

Note: There ARE some objects where this does not hold, where you can call methods without mutex locking. Most of them are associated with multithreading, e.g. Mutex class itself...

Yes, I know about Mutex from last thread. I'm using it for socket. Problem is: when I open static Socket in main loop (console app), and try to read it from thread, I'm getting ASSERT(IsOpen ... ).

IsOpen for this Socket returns different results: in main thread - true, in other thread - false. I'm confused about this, sorry if the reasons are stupid.

Sorry for my English,  
Anton

Is not it possible that the thread gets to read it first?

If that seems OK, a little testcase would help...

Mirek

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Subject: Re: Socket and multiple Threads  
Posted by [Sc0rch](#) on Mon, 12 Jul 2010 14:20:19 GMT  
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I make the testcase and it works good, socket is open in all threads. Sorry me for the waste of your time! I'll try to test more, before writing in threads.

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