

# Re: Critical section shared between dll and main program

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*Source:*

<http://www.tech-archive.net/Archive/Development/microsoft.public.win32.programmer.kernel/2008-01/msg00084.htm>

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- *From:* "Volodymyr Shcherbyna" <[v\\_scherbina@xxxxxxxxxxxxxxxxxx](mailto:v_scherbina@xxxxxxxxxxxxxxxxxx)>
  - *Date:* Tue, 8 Jan 2008 09:35:28 +0100
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"Ben Voigt [C++ MVP]" wrote:

Or have you a way to call  
InitializeCriticalSection/EnterCriticalSection/LeaveCriticalSection  
without  
passing a pointer to the kernel32.dll?

In this case, usually the executable is statically linked against kernel32.lib. I am discussing the case of dynamic (user specific) DLL loading and passing PCRITICAL\_SECTION between (possibly) old version of DLL and an executable which was build in newer environment. The key factor here is that old DLL was not rebuilt.

"Ben Voigt [C++ MVP]" wrote:

Not a problem, because CRITICAL\_SECTION in each module must match the Win32 API definition, in which case they are certainly compatible with each other.

Agree. But if structure values change, both modules should be recompiled in a newer environment (in case if pointers to structures are exposed for external usage), if this is not done, the bug case appears.

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Volodymyr

NG tips:

[http://msmvps.com/blogs/v\\_scherbina/pages/microsoft-news-groups-tips.aspx](http://msmvps.com/blogs/v_scherbina/pages/microsoft-news-groups-tips.aspx)

"Ben Voigt [C++ MVP]" <[rbv@xxxxxxxxxxxxxxxxxx](mailto:rbv@xxxxxxxxxxxxxxxxxx)> wrote in message  
[news:uYYkCSYUIHA.5132@xxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:news:uYYkCSYUIHA.5132@xxxxxxxxxxxxxxxxxxxxxxxxxx)

"Volodymyr Shcherbyna" <[v\\_scherbina@xxxxxxxxxxxxxxxxxx](mailto:v_scherbina@xxxxxxxxxxxxxxxxxx)> wrote in message  
[news:eunYTAUIHA.5496@xxxxxxxxxxxxxxxxxxxxxxxxxx](mailto:news:eunYTAUIHA.5496@xxxxxxxxxxxxxxxxxxxxxxxxxx)

Re: Critical section shared between dll and main program

Actually, I would not suggest to pass pointer to any structure between different components like EXE and DLL.

I guess you aren't using Win32 then. Or have you a way to call InitializeCriticalSection/EnterCriticalSection/LeaveCriticalSection without passing a pointer to the kernel32.dll?

Because there is a theoretical chance of incompatible ABE (Application Binary Environment) bug. Even taking into account, that CRITICAL\_SECTION was not changed since 9x, there always exists a possibility that it might change, and the code will have a very hidden and weird bug, when DLL uses old version of CRITICAL\_SECTION and passes a pointer to it which is used in EXE, which was compiled in a newer environment, with another CRITICAL\_SECTION. This of course is a weird situation, but one should keep in mind such kind of possibility.

Not a problem, because CRITICAL\_SECTION in each module must match the Win32 API definition, in which case they are certainly compatible with each other.

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VolodymyrNG tips:

[http://msmvps.com/blogs/v\\_scherbina/pages/microsoft-newsgroups-tips.aspx](http://msmvps.com/blogs/v_scherbina/pages/microsoft-newsgroups-tips.aspx)  
"Scott McPhillips [MVP]" <org-dot-mvps-at-scottmcp> wrote in message  
<news:uSXppnyTIHA.5264@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>

"Mandi" <mandi@xxxxxxxxxxxx> wrote in message  
<news:%23nauFfyTIHA.4476@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>

I use critical section in my dll. Now I want  
to refer to it in my Main  
executable?  
Is there a way to do it?

There is no problem with passing its address between exe  
and DLL.

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Scott McPhillips [VC++ MVP]

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