
Subject: Re: How to check whether application is running
Posted by [Mindtraveller](#) on Tue, 10 Aug 2010 19:28:23 GMT
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The *recommended* (by M\$) way of detecting other instances of application is using of named mutex. Making mutex is much cheaper and much more atomic operation than creating window. Why is that important?

Imagine you have system with many programs running. And your program makes some complex initialization prior to creating window (i.e. reading XML configuration, constructing objects, etc.)

User runs your app. But OS is busy, it starts swapping. Your app is actually started, but user doesn't see any window, because your app is still initializing (please note that creating window is very resource consuming operation, especially for "busy" OS).

What happens next? User thinks that he did something wrong and executes your app again. This is problem #1.

The problem #2 arises next. Your app which was started second checks window (remember that window of the first app is not finished it's creation), doesn't find it and creates it's own window as if it is the first.

If you think this is rare situation, I must admit it is not. Multitasking can be hard sometimes. And app #2 can potentially be initialized even BEFORE app #1.

That is all why we should use much cheaper and quicker operation in the program start instead of checking opened window.

Let's return to recommended scheme:

1. Check mutex with name "*****"
2. If exists, exit app. If not - immediately create one and start app.
3. Important: all initialization should be done AFTER (1) and (2).

I don't know which is POSIX recommended way. I think our POSIX specialists may consult us.
