

## Re: WaitForSingleObject returns immediately

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*Source:*

<http://www.tech-archive.net/Archive/WindowsCE/microsoft.public.windowsce.app.development/2008-02/msg00058>

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- *From:* "Paul G. Tobey [eMVP]" <p space tobey no spam AT no instrument no spam DOT com>
  - *Date:* Mon, 18 Feb 2008 13:38:00 -0700
- 

On Windows Mobile, it won't work with virtually any application, no. On ordinary Windows CE, it will work with virtually everything (just the opposite).

Paul T.

"Fabio" <Fabio@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote in message  
<news:E8F8D48A-A47A-4DA9-8550-2E3FE1361942@xxxxxxxxxxxxxxxxxxxx>

Nevermind, I've decided to stop trying to work around it and simply accept the way it works. It won't work with applications that were not intended to be terminated.

Thanks a ton for the help!

Fabio.

"Paul G. Tobey [eMVP]" wrote:

But this is an application launcher of some sort or a "batch file" processor or what? I don't see any value in what you're doing, so far, so the big picture still isn't clear to me. If your application has no UI, you can just do this in the main() code for the program and no one will be the wiser because you have no message loop to block with calls to WaitForSingleObject(). If your application *\*does\** have UI, you *\*must\** continue to service your message loop while the other application runs. Why would the 'user' call you to do this simple operation? Still need a higher-level view...

Paul T.

Re: WaitForSingleObject returns immediately

"Fabio" <Fabio@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> wrote in message  
news:B80E6042-62EC-4EDE-8506-81650FA58704@xxxxxxxxxxxxxxxxxxxx

My application should be able to receive a command line and launch the application with the parameters specified on the command line.  
The user may choose to wait until the launched application terminates to continue or not. If he chooses to wait, my application returns the launched application exit code.  
So if the user decides to run a batch of applications sequentially, I have to wait until one is over to run the next.

Fabio.

"Paul G. Tobey [eMVP]" wrote:

Well, you wouldn't want the main thread of your application to use this scheme anyway. Doing a WaitForSingleObject() in the UI thread is *\*always\** a bad idea, whether on the desktop or on a device. At the very least, you should do that in a separate thread that is started in response to whatever UI event is supposed to trigger the process start, or do the process creation in the UI thread, but do *\*not\** block in WaitForSingleObject(), maybe using a timer or something to periodically check whether the application has exited or not.

No, that would be contrary to the system design for Windows Mobile.  
You would *\*absolutely not\** want to terminate random processes, either,

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even  
if  
you found a way to detect Smart Minimize  
from your process.

Take a step back and tell us \*what\* you're  
trying to do. We know how  
you're  
trying to do it, but we have no clear idea (or  
at least I don't), what  
this  
is all in service of. That is, why do you care  
when the application  
exits?  
Or if it exits? Or when it exits?

Paul T.

"Fabio"

<Fabio@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>

wrote in message

[news:8CCA4E18-4E24-4840-915C-01D37440ABF8@xxxxxxxxxxxxxxxxxxxx](mailto:news:8CCA4E18-4E24-4840-915C-01D37440ABF8@xxxxxxxxxxxxxxxxxxxx)

Oh, that explains it. Didn't  
know that using WM make  
any difference  
in  
this  
case.

The worst part is that I can't  
use the switcher bar while  
my  
application  
is  
blocked, resulting in a  
deadlock unless the  
launched application has  
a  
specific option to terminate  
it.

Is there a way to launch an  
application with some sort  
of "disable  
start  
minimize" flag or monitor  
the application messages to  
terminate the  
process  
when it is suspended for this  
Smart Minimize?

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Fabio.

"Paul G. Tobey [eMVP]"  
wrote:

Wait a  
minute!  
This is  
Windows  
CE or  
Windows  
Mobile? If  
WM,  
that's  
100%  
explained  
(and there's  
nothing you  
can do  
about it that  
I can think  
of).  
If  
it's  
Windows  
CE, it  
should work  
correctly. In  
Windows  
Mobile, to  
improve  
responsiveness,  
Microsoft  
set things  
up so that  
the X  
button does  
not  
close  
the  
application.  
It's called  
Smart  
Minimize  
and you can  
look up  
the

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details  
in the  
newsgroup  
archives  
and all over  
the place.  
When you  
do  
that,  
launching  
the program  
from the  
Start menu  
is, of  
course,  
much  
faster,  
since  
you're not  
launching  
anything,  
really.

Paul T.

"Fabio"

<Fabio@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>

wrote in  
message

[news:5A5D8D25-0970-4030-8EBD-43DACC0B53AF@xxxxxxxx](mailto:news:5A5D8D25-0970-4030-8EBD-43DACC0B53AF@xxxxxxxx)

I  
think  
I  
found  
out  
why  
it  
is  
working  
that  
way.  
I  
used  
ToolHelp  
functions  
to  
check  
the  
process  
list

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and  
noticed  
there  
were  
closed  
programs  
on  
the  
list.  
I  
activated  
the  
Switcher  
Bar  
on  
the  
PDA,  
closed  
all  
programs  
and  
started  
my  
application  
in  
debug.

So  
here's  
what  
really  
happens  
when  
I  
run  
my  
application:  
The  
first  
time  
my  
application  
tries  
to  
launch  
another  
application,  
it  
gets  
blocked  
indefinetely

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because  
hitting  
'X'  
does  
not  
terminate  
the  
process.  
If  
I  
force  
my  
application  
to  
stop  
and  
run  
it  
again,  
it  
"calls"  
back  
the  
same  
process  
it  
launched  
the  
last  
time  
instead  
of  
launching  
a  
new  
one,  
but  
this  
time  
WaitForSingleObject  
returns  
immediately.

I  
still  
don't  
know  
how  
to  
make  
it

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work  
the  
way  
I  
want  
though.

Fabio.

"Fabio"  
wrote:

```
Oh  
sorry,  
I  
should  
have  
explained  
that.  
Here's  
its  
definition:  
void  
*startInfo  
=  
NULL;  
#if  
!defined  
WINCE  
STARTUPINFO  
si;  
memset(&si,  
0,  
sizeof(si));  
startInfo  
=  
&si;  
#endif
```

I  
don't  
like  
to  
spread  
#ifdef  
statements  
inside  
the  
functions

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and  
this  
way  
the  
rest  
of  
the  
function  
is  
pretty  
much  
the  
same  
for  
both  
WIN32  
and  
WINCE.  
Anyway,  
using  
NULL  
instead  
of  
startInfo  
doesn't  
solve  
the  
problem.

Right  
now  
I'm  
using  
a  
device  
with  
Windows  
CE  
.NET  
and  
evc4,  
but  
my  
goal  
is  
to  
make  
the  
application  
compatible  
with

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Windows  
CE  
3.0  
and  
above.

Fabio.

"Paul  
G.  
Tobey  
[eMVP]"  
wrote:

Not  
sure,  
but  
startInfo  
is  
not  
supported,  
according  
to  
the  
help  
I  
have.  
What's  
that  
set  
to?  
What  
version  
of  
Windows  
CE  
are  
we  
talking  
about?

Paul  
T.

"Fabio"  
<Fabio@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>  
wrote

Re: WaitForSingleObject returns immediately

in  
message  
[news:0C785499-92D4-472B-9C4A-EAFD](mailto:news:0C785499-92D4-472B-9C4A-EAFD)

Hi.

I'm  
making  
an  
application  
that  
needs  
to  
launch  
an  
external  
application  
and  
wait  
until  
it  
is  
closed  
to  
continue.  
Here's  
is  
the  
code:

```
if  
(!(ret  
=  
!CreateProcess(szCommand,  
szArgs,  
null,  
null,  
false,  
0,  
null,  
null,  
startInfo,  
&processInfo)))  
{  
WaitForSingleObject(processInfo.hP  
INFINITE);  
GetExitCodeProcess(processInfo.hPr  
&ret);  
}  
CloseHandle(processInfo.hThread);  
CloseHandle(processInfo.hProcess);
```

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}

It works in WIN32 with any application and works in WINCE when the application launched is the HelloWorld example created by evc4 using the new project wizard. However, it does not work in WINCE when I call other applications, like iexplore, notes, pword, fexplore, etc... Instead of waiting, the

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function  
returns  
immediately  
the  
value  
WAIT\_OBJECT\_0  
and  
GetExitCodeProcess  
fills  
the  
ret  
variable  
with  
0,  
even  
though  
the  
process  
is  
still  
running.

What  
should  
I  
do  
to  
make  
it  
work  
as  
expected?

Thanks  
in  
advance.

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