Subject: Q: call_external hangs IDL Windows GUI? Posted by Joshua Lynch on Wed, 20 Apr 2005 18:31:35 GMT

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Hello,

I have an application that uses call_external to call a C function which waits for some network input and then returns. Unfortunately it seems that entire IDL IDE hangs for every call to call_external.

Is this, in fact, a correct assumption?

I've tested the same application under Unix and it does not hang the IDE.

It seems as though when I'm running the application and don't click anywhere in the IDE, it runs fine (sort of, it prints its data out 2, 3, 4 five lines at a time, instead of smoothly, one at a time). As soon as I click anywhere in the IDE the menu bar disappears and if I click again the title bar displays the dreaded "Application Not Responding" string.

My guess is that the IDE is stopped while waiting for the C function to return?

Am I missing something simple?

Thanks in advance.

--josh

Subject: Re: Q: call_external hangs IDL Windows GUI? Posted by Rick Towler on Fri, 22 Apr 2005 21:35:50 GMT View Forum Message <> Reply to Message

```
Yes, same goes. :(
```

-Rick

Joshua Lynch wrote:

- > Do DLMs suffer the same blocking problem under Windows?
- > Thanks for the response!
- >
- > --josh

```
>
>
> b_gom@hotmail.com wrote:
>> Joshua.
>>
>> call_external does block in Windows (there is no multithreading in the
>> IDL interpreter) You can, however, call an external function that
>> starts a thread and then returns quickly to IDL. You will have to sort
>> out the messaging between the threads on your own though.
>>
>> Good luck.
>>
>> Brad
>> Joshua Lynch wrote:
>>
>>> Hello,
>>> I have an application that uses call external to call a C function
>>> which waits for some network input and then returns. Unfortunately
>>> it seems that entire IDL IDE hangs for every call to call external.
>>>
>>> Is this, in fact, a correct assumption?
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>>> I've tested the same application under Unix and it does not hang the
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>>> click again the title bar displays the dreaded "Application Not
>>> Responding" string.
>>> My guess is that the IDE is stopped while waiting for the C function
>>> to return?
>>>
>>> Am I missing something simple?
>>> Thanks in advance.
>>>
>>> --josh
>>
```

Subject: Re: Q: call_external hangs IDL Windows GUI?

Josh,

not knowing exactly what you want to do, I'd suggest making a DLM with one function that spawns a thread for computation, and another function that polls to see if the thread is complete (by checking a global variable for example). In IDL you'd either stay in a loop until the polling function succeeds, or you'd set up a timer widget to periodically check the thread status.

Brad

```
Joshua Lynch wrote:
> b_gom@hotmail.com wrote:
>> Joshua.
>>
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the
>> IDL interpreter) You can, however, call an external function that
>> starts a thread and then returns quickly to IDL. You will have to
sort
>> out the messaging between the threads on your own though.
>>
>
> Any suggestions on how to make IDL wait until the thread is
completed?
> Is there a way to block on a variable (preferably not to busy wait)
in
> IDL and have the C code modify it? Or should I just go RTFM? :-)
>
> Thanks again.
>
> --josh
```