
Subject: Can a CALL_EXTERNAL .dll create a window?
Posted by [Matt Feinstein](#) on Fri, 29 Aug 2003 15:37:00 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi all--

I'm trying to write a CALL_EXTERNAL .dll that does off-screen hardware-assisted OpenGL rendering. My first try crashes IDL pretty much immediately, so I'm trying to eliminate possibilities for bugs. This tends to be difficult, since you can't run a .dll by itself... & it would be good if I could get some help in focussing my efforts on likely suspects.

The first suspect I can think of is that I have to create a Win32 window in the .dll. The reason I have to do this is that to get an off-screen hardware assisted rendering context one -has- to begin with an on-screen hardware assisted rendering context, which, in turn, means that you have to create a window. Is there a fatal difficulty in doing this in an IDL CALL_EXTERNAL .dll? Or, better, is there some combination of window properties that make it OK?

Any help here would be appreciated.

Matt Feinstein

--

There is no virtue in believing something that can be proved to be true.

Subject: Re: Can a CALL_EXTERNAL .dll create a window?
Posted by [Matt Feinstein](#) on Wed, 03 Sep 2003 18:02:20 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Fri, 29 Aug 2003 11:37:00 -0400, Matt Feinstein <nospam@here.com> wrote:

> Hi all--
>

... was trying to create a Win32 window in a CALL_EXTERNAL .dll, but seemed to be getting nowhere...

> Matt Feinstein

Since I asked the question, I guess I should now answer it.

Yes, you can create a Win32 window in a CALL_EXTERNAL .dll, complete with a window class and a runty WinProc to handle WM_CREATE and

WM_DESTROY events that are generated when you create and destroy the window. In places in the Win32 hocus-pocus where I needed an instance, I used GetModuleHandle(NULL). I'd say, FWIW, that it's a testament to IDL's stability that one can get away with this sort of thing...

And, the 'crash' that I was getting initially was due to how I was treating the WM_DESTROY event-- I called PostQuitMessage(0)-- which, correctly, forced IDL to quit.

D'oh.

And, not only that, but the .dll does the desired hardware-accelerated off-screen rendering!

Matt Feinstein

--

There is no virtue in believing something that can be proved to be true.

Subject: Re: Can a CALL_EXTERNAL .dll create a window?
Posted by [Rick Towler](#) on Wed, 03 Sep 2003 19:37:56 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Matt,

Would you be willing/able to share some example code? I understand if you can't, but need to ask. I have wanted to play with this for a while but I am having a hard time justifying the investment of time. Anything that could help speed the process would be greatly appreciated.

-Rick

"Matt Feinstein" wrote in message ...

> On Fri, 29 Aug 2003 11:37:00 -0400, Matt Feinstein > wrote:

>

>> Hi all--

>>

>

> ... was trying to create a Win32 window in a CALL_EXTERNAL .dll, but
> seemed to be getting nowhere...

>

>> Matt Feinstein

>

> Since I asked the question, I guess I should now answer it.

>

> Yes, you can create a Win32 window in a CALL_EXTERNAL .dll, complete
> with a window class and a runty WinProc to handle WM_CREATE and

> WM_DESTROY events that are generated when you create and destroy the
> window. In places in the Win32 hocus-pocus where I needed an instance,
> I used GetModuleHandle(NULL). I'd say, FWIW, that it's a testament to
> IDL's stability that one can get away with this sort of thing...
>
> And, the 'crash' that I was getting initially was due to how I was
> treating the WM_DESTROY event-- I called PostQuitMessage(0)-- which,
> correctly, forced IDL to quit.
>
> D'oh.
>
> And, not only that, but the .dll does the desired hardware-accelerated
> off-screen rendering!
>
> Matt Feinstein
>
> --
> There is no virtue in believing something that can be proved to be true.

Subject: Re: Can a CALL_EXTERNAL .dll create a window?
Posted by [Matt Feinstein](#) on Thu, 04 Sep 2003 12:27:29 GMT
[View Forum Message](#) <> [Reply to Message](#)

On Wed, 3 Sep 2003 12:37:56 -0700, "Rick Towler"
<rtowler@u.washington.edu> wrote:

>
> Hi Matt,
>
> Would you be willing/able to share some example code? I understand if you
> can't, but need to ask. I have wanted to play with this for a while but I
> am having a hard time justifying the investment of time. Anything that
> could help speed the process would be greatly appreciated.
>
> -Rick
>

We've drifted off-topic here-- into the wilds of OpenGL and Win32
programming...

I'll email you code for a Win32 executable that creates an off-screen
hardware-accelerated OpenGL context and then queries it for its
properties. It's not hard to convert this code into a CALL_EXTERNAL
.dll, but note the comments I made in my previous post.

If anyone else wants the code, email me at matt.feinstein@jhuapl.edu

Matt Feinstein

--

There is no virtue in believing something that can be proved to be true.
