Subject: Can Timer interrupt widget callbacks?
Posted by dg86 on Sun, 29 Mar 2015 12:45:28 GMT
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Dear Folks,

A change in the behavior of Timer callbacks from IDL 8.3 to IDL 8.4 has broken one of my applications, and I could use some help in fixing it.

Under IDL 8.3, the firing of an asynchronous Timer preempts widget callbacks.
This behavior appears to have been reversed in IDL 8.4, so that callbacks now take precedence.

Here's the issue ...

My application has a widget_draw object that is supposed to update at regular intervals while the user drags graphics objects across the screen. I'm using Timer events to trigger the updates. Under IDL 8.3, the widget_draw's animation is smooth. Under IDL 8.4, the animation stops updating during drag events, which defeats the purpose of the animation.

Is there any way to restore the old behavior so that firing a Timer interrupts a widget callback, perhaps as an option to Timer::Set()?

If there's no way to make the Timer "dominant", does anyone have suggestions for modifying my widget callbacks so that they can check for pending timer events and handle them?

All the best,

David

Subject: Re: Can Timer interrupt widget callbacks?
Posted by Helder Marchetto on Sun, 29 Mar 2015 18:58:32 GMT
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On Sunday, March 29, 2015 at 2:45:33 PM UTC+2, David Grier wrote:
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I hope it helps.

Cheers,
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Subject: Re: Can Timer interrupt widget callbacks?
Posted by dg86 on Sun, 29 Mar 2015 19:50:29 GMT
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Even so, knowing about !DEBUG_PROCESS_EVENTS will be very useful for building widget programs
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Posted by Helder Marchetto on Mon, 30 Mar 2015 09:00:34 GMT
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Answer: timers have been modified "under the hood" according to this post:
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Subject: Re: Can Timer interrupt widget callbacks?
Posted by dg86 on Mon, 30 Mar 2015 10:13:51 GMT
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Subject: Re: Can Timer interrupt widget callbacks?
Posted by dg86 on Tue, 31 Mar 2015 02:32:01 GMT
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Dear Helder,

I took your advice and tried firing the timer during the time-consuming mouse-move event handler. It works in the sense that the animation appears to play smoothly, even if the timing is not really uniform. The price is that my camera objects have to provide a timer_id property, even if they don't use
timers. My interrupt-driven cameras (which don't use timers) provide a fake id, and the call to timer.fire(fake_id)
within the mouse-move event handler fails silently.

This is a nasty hack, but saves me having to sweat over a real solution, at least for the time being. The folks using my code can upgrade to IDL 8.4, and all is well with the world.

Thanks again,

David
