Subject: Re: asynchronous timers
Posted by dg86 on Thu, 14 Aug 2014 15:16:13 GMT
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On Thursday, August 14, 2014 6:40:01 AM UTC-4, superchromix wrote:
> Has anyone put to use the new "asynchronous timer" that was introduced in version 8.3?
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> I was just reading the help section for it and noticed that this timer can "interrupt pro code" when it fires. hmmm. Does this offer some possibilities for pseudo-"multithreaded" operation? For example, one process could be off doing a heavy calculation, and a separate gui process could periodically fire a timer and update it's display?
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> thoughts?
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> thanks
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> Mark

I've used the asynchronous timers to update a video interface for a microscope controller: you click on the video image to make things move under the microscope. IDL's timers do indeed interrupt IDL code, but do not interrupt calls to the compiled libraries underlying IDL code. For instance, a timer won't interrupt a long-running FFT, but instead will take action once the FFT is complete and control has returned to IDL. The same is true of spawn'ed commands and calls to external libraries.

The set time on a timer thus is the minimum time before the callback routine will execute. The actual time depends on external factors.

It appears that timer events can pile up, and there does not appear to be any way to look at the interrupt queue or to modify it. It is possible to clear the queue altogether, but that isn't always desirable. I may be missing something here, so other folks' insights would be helpful.

TTFN,

David