Subject: Re: howto best Ctrl Refresh handling w/ MT & very frequent refreshes
Posted by kohait00 on Tue, 22 Jun 2010 09:24:58 GMT
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thanks for the example.

i indeed could see performance wins applying the overall approach. so together with the example, we could consider this problem to be solved to a satisfactory degree.

i just try to sum up the things we learned here:

PROBLEM:
frequent, independant refreshes to a lot of Ctrl's (deep in tree or not) caused by different threads than the Main thread produce a high CPU load, becaause the Ctrl's are indeed refreshed one by one (or at least almost). additionally, the threads passing the refresh work over to the MainThread (using ICall interface etc.) are beeing slept for that time. -> main thread invokes Refresh just too often, because the Updates (that trigger the Refresh) are independant.

SOLUTION:
separate the data Update (SetData, SetText, SetLabel, etc) of the Ctrl's from the natural / automatic triggering of Refresh() (inside Ctrl's, unaccessible), by:

* using a cached class like the above (if you only use Get/SetData). it overloads the Get/SetData() and prevents the triggering of Refresh each time..

* (more complex) providing a caching database independant of Get/SetData() (or other Interface functions).

both solutions conclude with a periodic Refresh() call for all (meanwhile) affected/changed Ctrl's. Refresh time does not need to be faster than 200 ms.