
Subject: Re: Need a suggestion about mouse processing inside threads

Posted by [mdelfede](#) on Tue, 13 Dec 2011 17:00:18 GMT

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Just to explain a bit more my thoughts....

Managing code (class ThreadQueue, which is a direct parent of UppCadDocument:)

```
// wait for next event and process it
// returns false if shutting down
bool ThreadQueue::WaitAndProcessEvent(void)
{
    // test again if shutting down
    if(Thread::IsShutdownThreads() || exiting)
        return false;

    // wait for events
    semaphore.Wait();

    // test again if shutting down
    if(Thread::IsShutdownThreads() || exiting)
        return false;

    Callback c;

    // pops next event
    INTERLOCKED_(mutex) {
        ASSERT(!queue.IsEmpty());
        c = queue.Head();
        queue.DropHead();
    }

    // runs the callback
    c.Execute();

    // test again if shutting down
    if(Thread::IsShutdownThreads() || exiting)
        return false;

    return true;
}

// sends an evento to this thread
void ThreadQueue::SendEvent(Callback c)
{
    INTERLOCKED_(mutex) {
        queue.AddTail(c);
    }
}
```

```

    semaphore.Release();
}
}

```

Document loop :

```

// document command loop
void UppCadDocument::commandLoop(void)
{
    while(WaitAndProcessEvent())
    {
        if(commandLine.HasCommand())
        {
            String cmd = commandLine.GetCommand();
            if(cmd != "<ESC>" && cmd != "")
                SendCommand(cmd);
        }
    }
}

```

And, for example, a view mouse event handling :

```

////////////////////////////////////
// middle up - resets pan/3dorbit behaviour
void UppCadView::MiddleUp(Point p, dword keyflags)
{
    SendViewEvent2(uppCadDocument. MiddleUp0, p, keyFlags);
}

void UppCadView::MiddleUp0(Point p, dword keyflags)
{
    isPanning = false;
    PanStartPoint.SetNull();

    isRotating = false;
} // END UppCadView::MiddleUp()

```

(SendViewEvent2 is a macro calling uppCadDocument::SendEvent() with correct parameters)